SonicWALL ViewPoint 2.0 User's Guide



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Introducing SonicWALL ViewPoint

Monitoring critical network events and activity, such as security threats, inappropriate Web use, and bandwidth levels, is an essential component of network security. SonicWALL ViewPoint complements SonicWALL's Internet security offerings by providing detailed and comprehensive reports of network and firewall activities.

SonicWALL ViewPoint is a browser-based software application that creates dynamic web-based network reports. With SonicWALL ViewPoint, you can monitor network access, enhance security, and anticipate future bandwidth needs.

SonicWALL ViewPoint generates both real-time and historical reports to offer a complete view of all activity through one or more SonicWALL Internet Security appliances. It generates the reports based on the stream of syslog data received from each SonicWALL appliance and summarizes this data, allowing you to view the reports for current date, a previous day, or for a range of days.

SonicWALL ViewPoint:

- Displays bandwidth use by IP address and service.
- Identifies inappropriate Internet use.
- Provides detailed reports of attacks.
- Collects and aggregates system and network errors.
- Shows Virtual Private Network (VPN) events and problems.
- Presents visitor traffic to your website.
- Provides detailed daily firewall logs to analyze specific events.

SonicWALL ViewPoint offers the following features:

- Web-based browser reporting application—SonicWALL ViewPoint can be accessed from a local or remote system using a web browser.
- On-demand reporting—SonicWALL ViewPoint provides immediate reporting function for users requiring quick results.
- Comprehensive set of graphical reports—SonicWALL ViewPoint offers a comprehensive set
 of graphical reports including firewall attacks, bandwidth usage, Web site visits, user activity,
 and others. These reports can be generated for a single firewall or as aggregate reports for multiple firewalls.

- Single firewall real-time and historical reports—SonicWALL ViewPoint offers numerous reports for one SonicWALL appliance.
- Aggregate real-time and historical reports—SonicWALL ViewPoint offers aggregate reports for multiple SonicWALL appliances.
- Summarized Data—SonicWALL ViewPoint summarizes its data, allowing the user to view reports for the current date, a previous day, or a range of days.
- Support for multiple firewalls—SonicWALL ViewPoint can generate reports for one or more SonicWALL appliances.
- Log Viewer—Enables you to search the database for a specific firewall activity or event. It can also be used to search the database for activity types, narrowing the set of matches by specifying a destination or source IP address over a specified range of dates.
- **Top Usage Reports**—SonicWALL ViewPoint includes a large range of reports that display the top sites, top users, and top sites per user including 5, 10, 20, 50, and 100.
- Concurrent login sessions—Multiple users can log into SonicWALL ViewPoint concurrently.
- **Syslog reporting**—SonicWALL ViewPoint generates reports based on the stream of syslog data received from each SonicWALL appliance.
- **Embedded MSDE database**—SonicWALL ViewPoint installs MSDE database to store raw and summarized syslog data from each SonicWALL appliance.
- Platform support—SonicWALL ViewPoint supports Windows 2000 Professional, Windows 2000
 Server and Windows XP Professional. SonicWALL ViewPoint software must be installed on a Windows server that can be located on the same network of the SonicWALL appliance's LAN interface or on the WAN side.
- Supports SonicWALL Internet Security Appliances—SonicWALL ViewPoint supports 2nd and 3rd generation SonicWALL appliances, including the new SonicWALL Wireless product.
- **SonicWALL firmware**—SonicWALL ViewPoint supports SonicWALL appliances running firmware 6.3.1.4 and above and SonicWALL Wireless product running SonicOS 1.0 and above.

Installing SonicWALL ViewPoint

This chapter describes how to install SonicWALL ViewPoint.

To install SonicWALL ViewPoint, complete the following procedures:

- Review the installation requirements. See "Installation Overview" on page 14.
- Install SonicWALL ViewPoint, see "Installation" on page 14.
- Register SonicWALL ViewPoint, see "Installation" on page 14.

Installation Overview

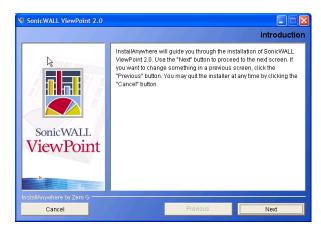
In order to install and run SonicWALL ViewPoint, you must be logged in as the administrator and the SonicWALL ViewPoint server must meet the following requirements:

- Windows 2000 or Windows XP Professional.
- If accessed from the WAN interface, the SonicWALL appliance must have a static IP address. Otherwise, it may have either a static or dynamic IP address.
- Local and remote browser access: Microsoft Internet Explorer 5.5 or later.
- Support for Java Plug-in JRE 1.3.1
- Pentium III or IV with a 1.4 GHz or faster processor.
- Minimum 512 MB RAM.
- At least 20 GB of free disk space.
- Hostname that is 20 characters or less.
- The SonicWALL ViewPoint system must be connected to the network.
- SonicWALL ViewPoint cannot be installed in a folder that has an embedded blank space. For example, "Program Files."

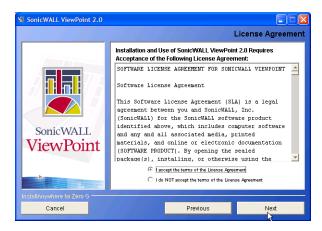
Installation

When you are ready to install SonicWALL ViewPoint, follow these steps:

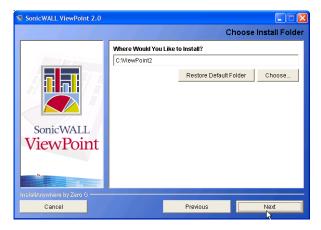
- 1. Log on to the computer as administrator.
- Locate the SonicWALL ViewPoint install file on the network. Double-click the VPS.exe. The Introduction screen appears.



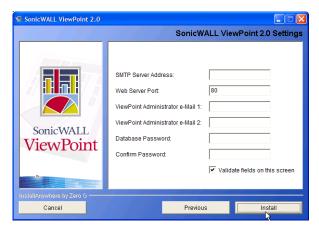
3. Click Next. The License Agreement screen appears.



- 4. Select from the following:
 - To accept the terms of the license agreement, select I accept the terms of the License Agreement and click Next. The Choose Install Folder screen appears.
 - To not accept the terms, select I do NOT accept the terms of the License Agreement and click Next. The SonicWALL ViewPoint installation program closes and the product does not install.



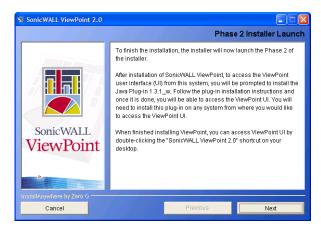
To accept the default location, click Next. To select a different location, click Choose and select a folder. Click Next. The Settings screen appears.



Do the following:

- Enter the IP address or host name of the Simple Mail Transfer Protocol (SMTP) server in the SMTP Server Address field.
- Enter the number of the web server port in the **Web Server Port** field (default: 80).
- Enter the e-mail addresses of administrators who will receive e-mail notifications from SonicWALL ViewPoint.
- Enter and confirm the database password in the Database Password and Confirm Password fields.
- To validate the entries on this page, select the **Validate fields on this screen** check box.

Click **Install**. The installation program begins copying SonicWALL ViewPoint files and installing the MSDE database.



6. Click Next. Phase 2 of the installation begins.

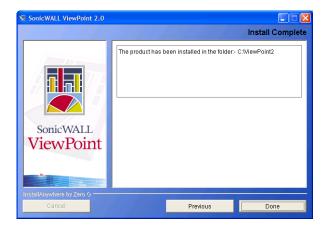


7. Click OK.

Note: The database name "sa" cannot be changed.



The installation program begins installing the database components. When it is finished, the Install Complete screen appears.



- 8. Click **Done**. Installation is complete.
- 9. Restart the server.
- 10. Ensure the following SonicWALL ViewPoint services are running on your system:
 - SNWL ViewPoint Summarizer
 - · SNWL ViewPoint Syslogd
 - SNWL ViewPoint WebServer
 - MSSQL\$SNWL (MSDE database)

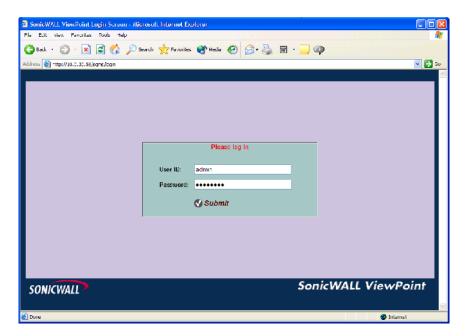
Logging in and out of SonicWALL ViewPoint

To start and log into SonicWALL ViewPoint, follow these steps:

- 1. Do one of the following:
- If you are logging in locally, double-click the SonicWALL ViewPoint icon on your desktop.
- If you are logging in from a remote location, open a web browser and enter http://viewpoint_ipaddress/sgms/login or http://viewpoint_ipaddress.

where viewpoint ipaddress is the IP address or hostname of the server.

The SonicWALL ViewPoint login page appears.



2. Enter the SonicWALL ViewPoint user ID (default: admin) and password (default: password).

Note: After the password is entered, an authenticated management session is established that times out after 5 minutes of inactivity.

For the security purposes, it is highly recommended to change the default password for the user admin. The maximum size of the SonicWALL ViewPoint User ID is 24 alphanumeric characters. If the password is more than 32 characters long, it is automatically be truncated. Do not use special characters (e.g., #+, % &). Embedded spaces in the password are also not allowed.

- Click Submit. SonicWALL ViewPoint opens.
- 4. If you are prompted to install the Java Plug-in 1.3 application from Sun, click **Yes** and follow the onscreen instructions to install the Java Plug-in application.
- 5. To logout, click **Logout** in the SonicWALL ViewPoint user interface (UI).

Registering SonicWALL ViewPoint

To register SonicWALL ViewPoint, follow these steps:

- Create a mysonicwall.com account—see "Creating a mysonicwall.com Account" on page 19.
- Register the SonicWALL appliance—see "Registering the SonicWALL Appliance" on page 19.
- Activate the ViewPoint Software—see "Activating the ViewPoint Software" on page 20.
- Enable the ViewPoint license on the SonicWALL appliance—see "Enabling the ViewPoint License" on page 21.

Creating a mysonicwall.com Account

If you do not already have a mysonicwall.com account, open a web browser and navigate to the following website:

http://www.mysonicwall.com

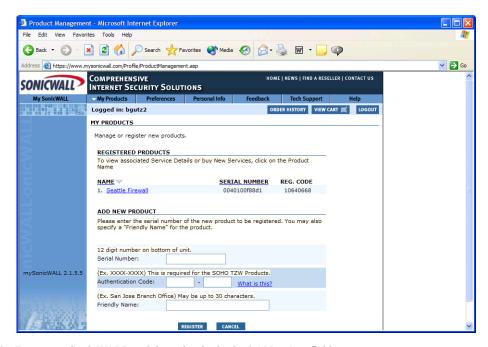
Then, follow the on-screen prompts to create a user account.

Registering the SonicWALL Appliance

To register the SonicWALL appliance, follow these steps:

1. Log on to your mysonicwall.com account.

2. Click My Products. The SonicWALL Product Registration page appears.



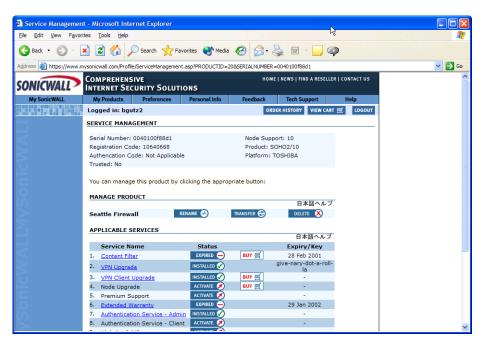
- 3. Enter your SonicWALL serial number in the **Serial Number** field.
- If you are registering a SonicWALL SOHO TZW, enter the authentication code in the Authentication Code field.
- 5. Enter a descriptive name for the SonicWALL appliance in the **Friendly Name** field.
- 6. Click **Register**. The mysonicwall.com website registers the SonicWALL appliance.

Activating the ViewPoint Software

To activate the SonicWALL ViewPoint software, follow these steps:

1. Log on to your mysonicwall.com account.

Click the label of the newly registered SonicWALL appliance. The Service Management page appears.



- 3. Locate the ViewPoint service and click its **Activate** button. The Activate Service dialog box appears.
- 4. Enter the ViewPoint Activation Key in the **Activation Key** field. The ViewPoint Activation Key is printed on the ViewPoint Software License Certificate shipped with the SonicWALL ViewPoint package.
- 5. Click **Submit**. After the Activation Key is registered, a ViewPoint License Key appears.

Note: SonicWALL ViewPoint shows up as an active licensed product under the SonicWALL appliance in your Mysonicwall.com account; it does not appear alongside the list of your SonicWALL appliances in the account.

Enabling the ViewPoint License

To enable the SonicWALL ViewPoint license, follow these steps:

- 1. Log into the SonicWALL appliance.
- 2. Expand the **Log** tree and click **ViewPoint**. The **ViewPoint** page appears.
- 3. Enter the ViewPoint License Key provided by mysonicwall.com in the Enter upgrade key field.
- 4. Click Upgrade.
- Restart the SonicWALL for the change to take effect.

If the SonicWALL appliance is running SonicOS, follow these steps:

- 1. Log on to the SonicWALL appliance.
- 2. Click Log, and then ViewPoint.
- Enter the ViewPoint License Key collected from MySonicwall.com into the Enter upgrade key field.
- 4. Click Apply.
- 5. Restart the SonicWALL for the change to take effect.

Configuring ViewPoint

This chapter describes configure SonicWALL ViewPoint. Select from the following:

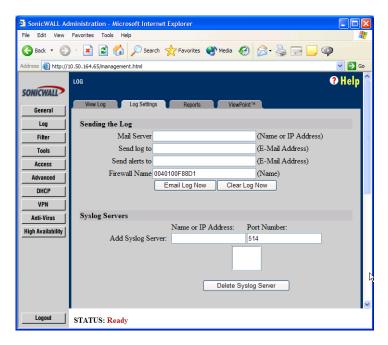
- To configure a SonicWALL appliance for SonicWALL ViewPoint, see "Configuring a SonicWALL Appliance for ViewPoint" on page 23.
- To configure access settings, see "Configuring Access to a SonicWALL Appliance" on page 25.
- To add a SonicWALL appliance to SonicWALL ViewPoint, see "Adding a SonicWALL Appliance to SonicWALL ViewPoint" on page 29.
- To delete a SonicWALL appliance from SonicWALL ViewPoint, see "Deleting a SonicWALL Appliance from SonicWALL ViewPoint" on page 32.
- To modify a SonicWALL appliance's settings, see "Modifying Settings for a SonicWALL Appliance" on page 33.
- To change the SonicWALL ViewPoint password, see "Changing ViewPoint Login Password" on page 34.
- To configure ViewPoint settings, see "Configuring ViewPoint Settings" on page 35.
- To manage ViewPoint sessions, see "Managing ViewPoint Sessions" on page 37.
- To configure reporting settings, see "Summarizer Settings" on page 38.

Configuring a SonicWALL Appliance for ViewPoint

The following instructions describe how to configure a SonicWALL appliance to send data to SonicWALL ViewPoint.

1. Log into the SonicWALL appliance.

2. Expand the **Log** tree and click **Log Settings**. The Log Settings page appears.



Enter the IP address or hostname and port (default: 514) of the SonicWALL ViewPoint server in the Add Syslog Server fields.

Note: For firmware 6.3.1.4, the fields are Syslog Server 1 and Syslog Server Port 1.

4. Enter 0 in the Syslog Individual Event Rate field.

The Syslog Individual Event Rate field reduces the number of repetitive events that are logged by SonicWALL ViewPoint. Although this prevents a log file from being full of repetitive events, setting the Syslog Individual Event Rate field to anything other than 0 results in inaccurate ViewPoint reports.

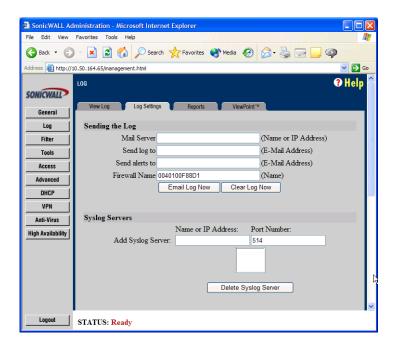
- 5. Select **Default** from the **Syslog Format** list box.
- 6. To ensure accurate and complete reporting, make sure that every event category in the **Categories** area is selected except for **Network Debug**.
- 7. When you are finished, click **Update**.

Note: SonicWALL ViewPoint expects the syslog data in UTC format. Make sure the Display UTC in logs check box on the General/Time screen for the SonicWALL appliance is selected.

If the SonicWALL appliance is running SonicOS, follow these steps:

1. Log into the SonicWALL appliance.

2. Click **Log** and then click **Automation**. The Automation page appears.



3. Enter 0 in the Syslog Individual Event Rate field.

The Syslog Individual Event Rate field reduces the number of repetitive events that are logged by SonicWALL ViewPoint. Although this prevents a log file from being full of repetitive events, setting the Syslog Individual Event Rate field to anything other than 0 results in inaccurate ViewPoint reports.

- 4. Select **Default** from the **Syslog Format** list box.
- Click Add in the Server Name section and enter the IP address or hostname and port (default: 514) of the SonicWALL ViewPoint server in the Add Syslog Server fields. Then, click Apply.
- To ensure accurate and complete reporting, click Categories and make sure that every event category in the Log Categories area is selected except for Network Debug.
- 7. When you are finished, click Apply.

Note: SonicWALL ViewPoint expects the syslog data to come in UTC format from a SonicWALL appliance. Therefore, it is important that the Display UTC in logs check box on the General/Time screen in the SonicWALL appliance is selected.

Configuring Access to a SonicWALL Appliance

For reporting, your SonicWALL appliance must be added to the SonicWALL ViewPoint UI. To function properly, SonicWALL ViewPoint must be able to access, log into, and authenticate the ViewPoint license

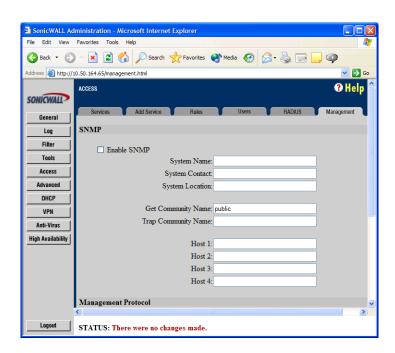
on the SonicWALL appliance. To accomplish this, SonicWALL ViewPoint can access the SonicWALL appliance from the LAN, WLAN, WAN, or over a VPN tunnel using HTTPS or HTTP.

- LAN interface—If the SonicWALL ViewPoint server is located on the same network as the SonicWALL appliance's LAN interface, SonicWALL ViewPoint can log into the SonicWALL appliance using HTTP or HTTPS. By default, both HTTP and HTTPS are enabled in your SonicWALL appliance. In this configuration, syslog traffic is sent to SonicWALL ViewPoint unencrypted and in the clear.
- VPN tunnel—If the SonicWALL ViewPoint server is located behind a VPN/firewall device, and if
 there is a VPN tunnel between your SonicWALL appliance and the firewall, SonicWALL ViewPoint
 can access your SonicWALL appliance using HTTPS or HTTP over the VPN tunnel. In this configuration, syslog traffic is sent to SonicWALL ViewPoint encrypted.
- WAN interface—If the SonicWALL ViewPoint server is located on the WAN side of your SonicWALL appliance, the SonicWALL appliance can be configured to allow SonicWALL ViewPoint to access it using HTTPS. In this configuration, syslog traffic is sent to the SonicWALL ViewPoint server in the clear.

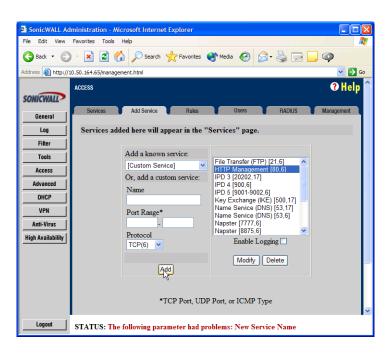
Note: If you use the WAN interface HTTPS option, the WAN IP address must be static. If the WAN IP address is dynamic, use the VPN tunnel option instead.

To enable WAN access using HTTPS, follow these steps:

- 1. Log into the SonicWALL appliance.
- 2. Expand the Access tree, and click Management. The Management page appears.

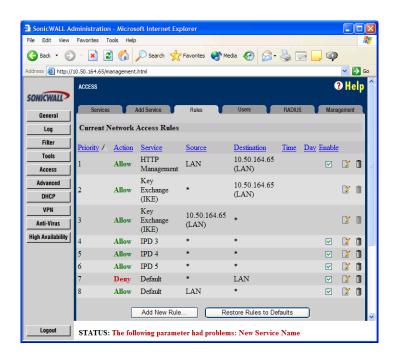


- 3. From the Management Method section, select from the LAN interface and remotely from the WAN interface from the Managed menu.
- 4. Click Update.
- 5. Click the **Add Service** tab. The Add Service page appears.

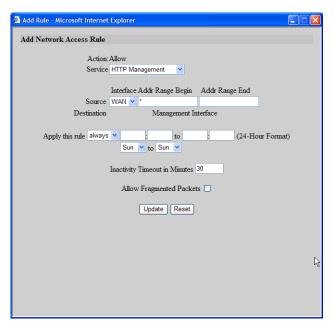


6. Select HTTPS Management from the Add a Known service list and click Add.

7. Click the **Rules** tab. The Rules page appears.



8. Click Add New Rule. The Add Network Access Rule dialog box appears.



9. Create a rule that allows SonicWALL ViewPoint to access your SonicWALL appliance using HTTPS (HTTPS Management service) from the WAN and click **Update**. The rule is added.

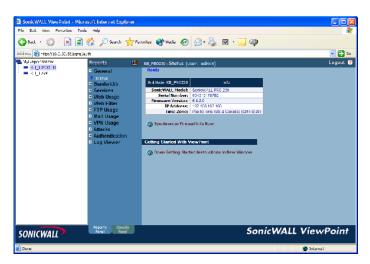
Note: The common name for the HTTPS Certificate must match the IP address or host name of the WAN interface.

Note: If your SonicWALL ViewPoint server is behind a firewall, you need to ensure the syslog traffic can reach the SonicWALL ViewPoint server. To do this, add the IP address of the firewall as the syslog server in your SonicWALL appliance, and create a rule in the firewall to allow syslog traffic from your SonicWALL appliance to the SonicWALL ViewPoint server.

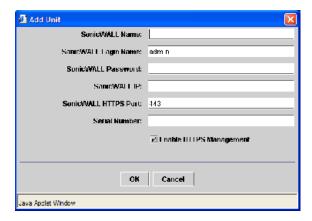
Adding a SonicWALL Appliance to SonicWALL ViewPoint

This section describes how to add a SonicWALL appliance to SonicWALL ViewPoint. To add a SonicWALL appliance, follow these steps:

1. Start and log into SonicWALL ViewPoint. The Status page appears.



2. Right-click MyReportsView in the left pane of the SonicWALL ViewPoint UI and select **Add Unit** from the pop-up menu. The Add Unit dialog box appears.



- 3. Enter a descriptive name for your SonicWALL appliance in the **SonicWALL Name** field.
 - **Note:** Do not enter the single quote character (') in the SonicWALL Name field.
- 4. Enter the username used to access your SonicWALL appliance in the **SonicWALL Login Name** field (default: admin).
- 5. Enter the password used to access the SonicWALL appliance in the **SonicWALL Password** field.
- Enter the IP address that is used to access the SonicWALL appliance in the SonicWALL IP Address field.

Note: If SonicWALL ViewPoint is on the same LAN as the SonicWALL appliance or accesses it through a VPN tunnel, enter the LAN IP address. If SonicWALL ViewPoint will access the SonicWALL appliance from the WAN interface, enter the static WAN IP address.

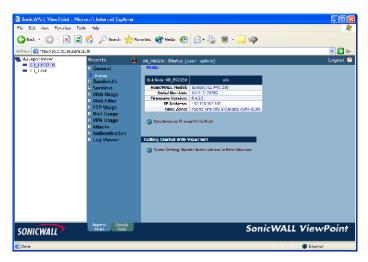
- If SonicWALL ViewPoint will log into the SonicWALL appliance using HTTP, deselect the Enable HTTPS Management check box and enter the HTTP port number used to access your SonicWALL appliance in the SonicWALL HTTP Port field (default: 80).
- If SonicWALL ViewPoint will log into the SonicWALL appliance using secure HTTP (HTTPS), enter the HTTPS port number in the SonicWALL HTTPS Port field (default: 443).
- 9. Enter the serial number of the SonicWALL appliance in the Serial Number field.
- 10. Click OK. SonicWALL ViewPoint finds the SonicWALL appliance and validates its ViewPoint license. When this is complete, the SonicWALL appliance appears in the left pane of the SonicWALL ViewPoint UI under MyReportsView.

Note: If one of the parameters in the Add Unit dialog box is left blank, SonicWALL ViewPoint will display a pop-up notification.

Viewing and Updating SonicWALL Information

To view the status of a SonicWALL appliance, follow these steps:

1. Start and log into SonicWALL ViewPoint. The Status page appears.



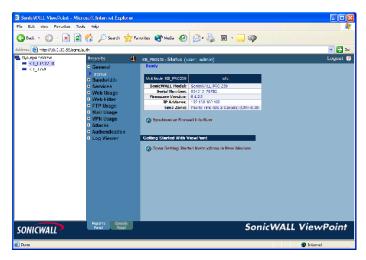
The page displays the SonicWALL model, serial number, firmware version, IP address, and time zone

2. To update this information, click Synchronize Firewall Info Now.

Deleting a SonicWALL Appliance from SonicWALL ViewPoint

To delete a SonicWALL appliance from SonicWALL ViewPoint, follow these steps:

1. Start and log into SonicWALL ViewPoint. The Status page appears.

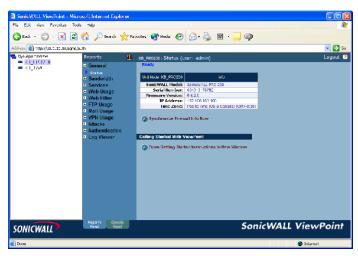


- 2. Select a unit in the left pane of the SonicWALL ViewPoint UI under MyReportsView.
- Right-click the unit and select Delete Unit from the pop-up menu. You are prompted to confirm the deletion.
- Click Yes. The SonicWALL appliance disappears from the left pane of the SonicWALL ViewPoint UI
 and is deleted from the ViewPoint database.

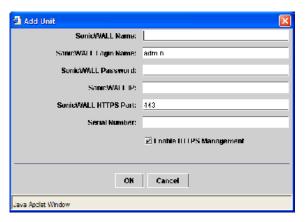
Modifying Settings for a SonicWALL Appliance

To change the settings of a SonicWALL appliance, whether you are changing the IP address, password, or other settings, follow these steps:

1. Start and log into SonicWALL ViewPoint. The Status page appears.



- 2. Select a unit in the left pane of the SonicWALL ViewPoint UI under MyReportsView.
- Right-click on the unit and select Modify Unit from the pop-up menu. The Modify Unit dialog box appears.



 Make changes to any of the fields. When you are finished, click OK. After SonicWALL ViewPoint finds the SonicWALL appliance and validates its ViewPoint license, the SonicWALL appliance will re-appear in the left pane of the SonicWALL ViewPoint UI under MyReportsView, and the View-Point database is modified.

Note: Do not enter the single quote character (') in the SonicWALL Name field.

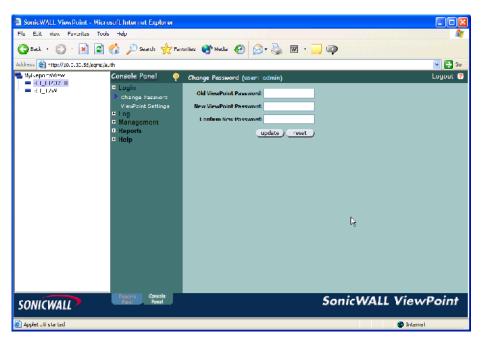
Note: If the SonicWALL ViewPoint server is on the same network as the SonicWALL appliance LAN interface or if the SonicWALL ViewPoint server needs to access the SonicWALL appliance through a VPN tunnel, enter the LAN IP address of the SonicWALL appliance in the IP Address field. If the SonicWALL ViewPoint server will access the SonicWALL appliance from the WAN, enter the WAN IP address of the SonicWALL appliance in the IP Address field. The WAN IP address must be static.

Note: The serial number cannot be changed in the Modify Unit dialog box. To change this value, see the instructions "Modifying the Serial Number of an Appliance" on page 135.

Changing ViewPoint Login Password

To modify the configuration settings for SonicWALL ViewPoint, follow these steps.

- 1. Start and log into SonicWALL ViewPoint.
- 2. Click the Console Panel tab at the bottom of the SonicWALL ViewPoint UL
- 3. Expand the Login tree and click Change Password. The Change Password page appears.



- 4. Enter the current ViewPoint password in the Old ViewPoint Password field.
- 5. Enter the new ViewPoint password in the **New ViewPoint Password** field.
- 6. Reenter the new ViewPoint password in the Confirm ViewPoint Password field.

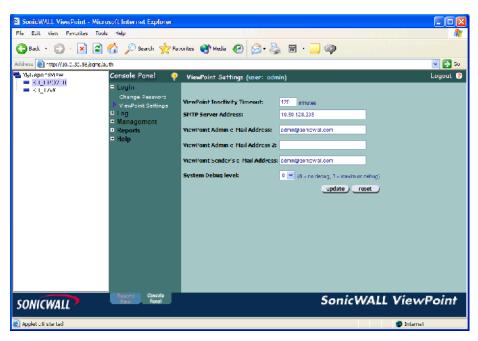
When you are finished, click Update. The password is changed. To clear all screen settings and start over, click Reset.

Note: The password is one-way hashed and any password of any length can be hashed into a fixed 32 character long internal password. The ViewPoint password cannot contain special characters (# + , % &) or any embedded blank spaces.

Configuring ViewPoint Settings

To modify the configuration settings for SonicWALL ViewPoint, follow these steps:

- 1. Start and log into SonicWALL ViewPoint.
- 2. Click the **Console Panel** tab at the bottom of the SonicWALL ViewPoint UI.
- 3. Expand the Login tree and click ViewPoint Settings. The ViewPoint Settings page appears.



4. The ViewPoint Inactivity Timeout period specifies how long SonicWALL ViewPoint waits before logging out an inactive user. To prevent someone from accessing the SonicWALL ViewPoint UI when SonicWALL ViewPoint users are away from their desks, enter an appropriate value in the ViewPoint Inactivity Timeout field (default: 5 minutes).

Note: This field can be set to a maximum of 32767 minutes.

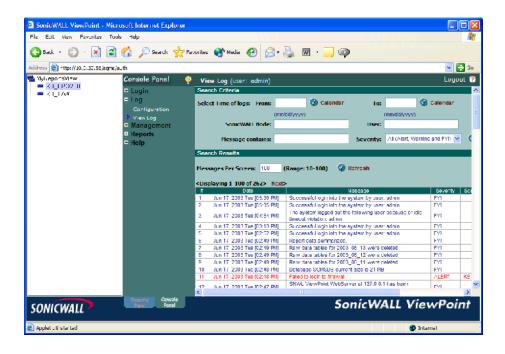
Enter the IP address or hostname of the Simple Mail Transfer Protocol (SMTP) server in the SMTP Server Address field.

- Enter the email addresses of the SonicWALL ViewPoint administrators in the ViewPoint Admin e-Mail Address and ViewPoint Admin e-Mail Address 2 fields.
- Enter the sender's email address that appears in messages sent from the SonicWALL ViewPoint in the ViewPoint Sender's e-Mail Address field.
- 8. Select the amount of debug information that is stored from the **System Debug Level** field. For no debugging, enter 0. For verbose debugging, enter 3.
 - Note: Debugging should only be enabled when troubleshooting any SonicWALL ViewPoint problems.
- When you are finished, click **Update**. The ViewPoint settings are changed. To clear the screen settings and start over, click **Reset**.

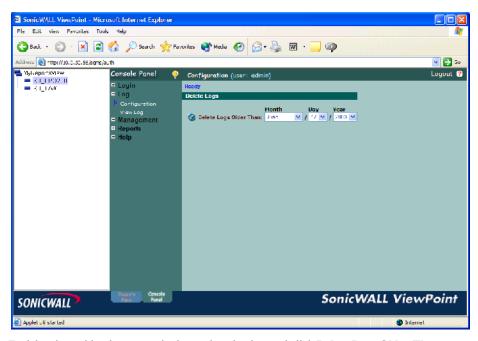
Managing ViewPoint Logs

SonicWALL ViewPoint logs its activities. To view these logs, follow these steps:

- 1. Start and log into SonicWALL ViewPoint.
- 2. Click the Console Panel tab at the bottom of the SonicWALL ViewPoint user interface (UI).
- 3. Expand the **Log** tree and click **View Log**. The View Log page appears.



4. SonicWALL ViewPoint also allows you to delete the old logs. To do so, expand the **Log** tree and click **View Log**. The Configuration page appears.



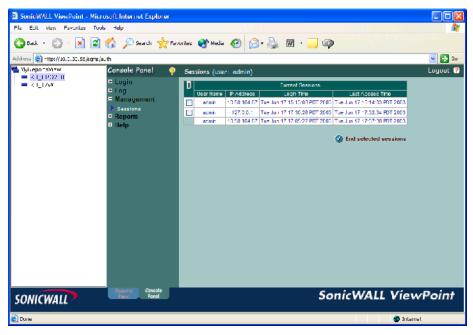
5. To delete logs older than a certain date, select the date and click **Delete Logs Older Than**.

Managing ViewPoint Sessions

To manage SonicWALL ViewPoint login sessions, follow these steps:

- 1. Start and log into SonicWALL ViewPoint.
- 2. Click the Console Panel tab at the bottom of the SonicWALL ViewPoint user interface (UI).

3. Expand the **Management** tree and click **Sessions**. The Sessions page appears.



Select the check box of each user to log off and click End selected sessions. The selected users are logged off.

Summarizer Settings

This section describes how to configure reporting settings. These include how often the summary information is updated, the number of days that summary information is stored, and the number of days that raw data is stored.

These reports are constructed from the most current available summary data. In order to create summary data, SonicWALL ViewPoint must parse the raw data files.

Note: Because reports are based on the most current summary data, the report may be old. For example, if the data was summarized four hours ago, all activity that occurred since the last summary will not be in the report.

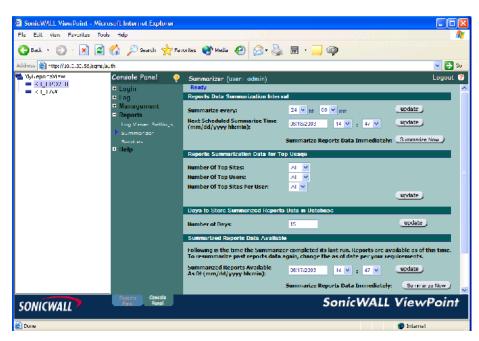
When configuring SonicWALL ViewPoint, you can select the amount of summary information to store. Summary information consumes approximately one kilobyte of information per SonicWALL appliance per day. Make sure the database is large enough to accommodate the number of days that you choose.

Additionally, you can select the amount of raw data to store. The raw data is made up of information for every connection. Depending on the amount of traffic, the raw data can quickly consume an enormous amount of space in the database. Be very careful when selecting how much raw information to store.

General Report Settings

To configure SonicWALL ViewPoint settings, follow these steps:

- 1. Start and log into SonicWALL ViewPoint.
- 2. Click the Console Panel tab at the bottom of the SonicWALL ViewPoint user interface (UI).
- 3. Expand the **Reports** tree and click **Summarizer**. The Summarizer page appears.



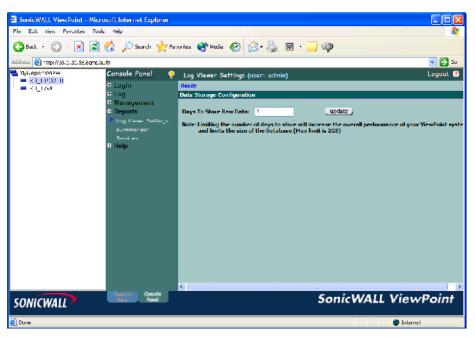
- Specify how often SonicWALL ViewPoint processes and updates summary information from the Time Between Summaries list box and click Update.
- To specify the next summary time, enter a date and time in the Next Scheduled Summary Time field and click Update.
- To update the summary information now, click Summarize Data Immediately. SonicWALL View-Point automatically processes the latest information and makes it available for immediate viewing.
 - Note: This will not affect the normally scheduled summarization.
- 7. Configure the following report setting defaults:
 - Select the default number of sites to be summarized from the Number of Top Sites list box (default: All).
 - Select the default number of users to be summarized from the Number of Top Users list box (default: All).
 - Select the default number of sites per user to be summarized from the Number of Top Sites Per
 User list box (default: All).

- Specify how many days of summarized data the SonicWALL ViewPoint will store in the database from the Days To Store Summarized Data list box and click Submit. To save all information, enter All (default: 15 days).
 - Summarized data consumes approximately one kilobyte of information per SonicWALL appliance per day. Make sure the database is large enough to accommodate the number of days that you choose.
- The Summary Data Available Until field displays when the data was last summarized. To re-summarize any data, enter a date and time and click Update.

Configuring Log Viewer Settings

To configure Log Viewer settings, follow these steps:

- 1. Start and log into SonicWALL ViewPoint.
- 2. Click the Console Panel tab at the bottom of the SonicWALL ViewPoint user interface (UI).
- 3. Expand the **Reports** tree and click **Log Viewer Settings**. The Log Viewer Settings page appears.



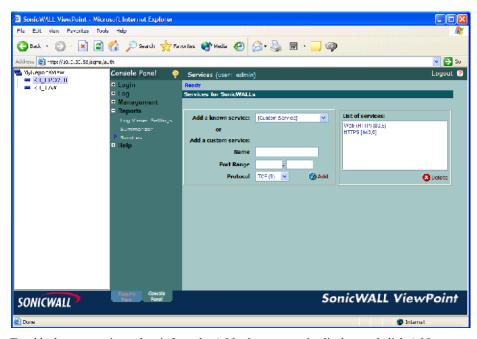
4. Specify how many days of raw data SonicWALL ViewPoint will store in the database from the **Days**To Store Raw Data list box and click Update. To save all information, enter All (default: 10 days).

Adding a Service

SonicWALL ViewPoint can monitor known services or custom services.

To add a service that is displayed in the services reports, follow these steps.

- 1. Start and log into SonicWALL ViewPoint.
- 2. Click the Console Panel tab at the bottom of the SonicWALL ViewPoint user interface (UI).
- 3. Expand the **Reports** tree and click **Services**. The Services page appears.



- 4. To add a known service, select it from the Add a known service list box and click Add.
- 5. To add a custom service, enter a name in the **Name** field, enter the service's port range, and select the protocol that it uses from the **Protocol** list box. Click **Add**.
- 6. To delete a service, select it and click **Delete**.

Viewing Reports

This chapter describes how to generate reports using SonicWALL ViewPoint.

Select from the following reports:

- To view general bandwidth usage reports, see "Viewing Bandwidth Reports" on page 43.
- To view bandwidth reports, by service, see "Viewing Service Usage Reports" on page 53.
- To view web usage bandwidth reports, see "Viewing Web Usage Reports" on page 56.
- To view reports on the number of attempts that users made to access blocked websites, see "Viewing Web Filter Reports" on page 71.
- To view file transfer protocol (FTP) bandwidth usage reports, see "Viewing File Transfer Protocol Reports" on page 87.
- To view mail bandwidth usage reports, see "Viewing Mail Usage Reports" on page 95.
- To view virtual private networking (VPN) reports, see "Viewing VPN Usage Reports" on page 103.
- To view reports on attempted attacks, see "Viewing Attack Reports" on page 111.
- To view detailed logging information, see "Viewing the Log" on page 132.
- To view user and administrator authentication reports, see "Viewing Authentication Reports" on page 127.

Note: When you log into SonicWALL ViewPoint, ViewPoint displays data for the previous day. This is true for every new login session.

Viewing Bandwidth Reports

Bandwidth reports display the amount of data transferred through the selected SonicWALL appliance(s).

Bandwidth reports are an ideal starting point for viewing overall bandwidth usage. You can view bandwidth usage view by the hour, day, or over a period of days. Additionally, you can view the top users of bandwidth.

From this information, you can determine network strategies. For example, if you need more bandwidth, you might need to upgrade network equipment, or you might simply need to curtail the bandwidth usage of a few employees.

Note: The single firewall report appears in firewall's local time. The aggregate multi-firewall report appears in Universal Time, Coordinated (UTC) or Greenwich Mean Time (GMT).

Select from the following:

- To view a summary of the daily bandwidth usage, see "Viewing the Bandwidth Summary Report" on page 44.
- To view bandwidth usage in real time, see "Monitoring Bandwidth Usage in Real Time" on page 46.
- To view the users who consume the most bandwidth, see "Viewing the Top Users of Bandwidth" on page 48.
- To view bandwidth usage over a period of time, see "Viewing Bandwidth Usage Over Time" on page 49.
- To view the users who consume the most bandwidth over time, see "Viewing the Top Users of Bandwidth Over Time" on page 51.

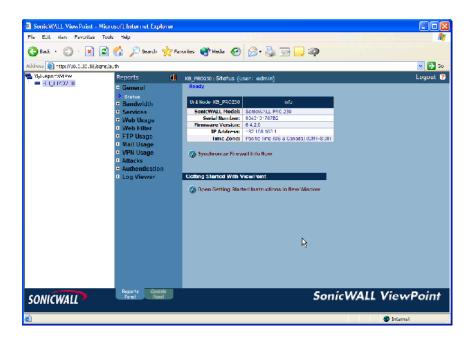
Viewing the Bandwidth Summary Report

The Bandwidth Summary report contains information on the amount of traffic handled by a SonicWALL appliance or group of SonicWALL appliances during each hour of the specified day.

To view the Bandwidth Summary report, follow these steps:

- 1. Start and log into SonicWALL ViewPoint.
- 2. Click the **Reports** tab.
- 3. Select the global icon, a group, or a SonicWALL appliance.

4. Expand the Bandwidth tree and click **Summary**. The Summary page appears.



- 5. The bar graph displays the amount of bandwidth transferred during each hour of the day.
- 6. The table contains the following information:
 - Hour—when the sample was taken.
 - Events—number of events or "hits."
 - MBytes—number of megabytes transferred.
 - % of MBytes—percentage of megabytes transferred during this hour, compared to the day. For example, if 1000 megabytes of data was transferred during the day and 100 megabytes was transferred at the 12:00 time period, the % of MBytes field will display 10%.
- SonicWALL ViewPoint shows today's report. To change the date of the report, click Settings. The Report Settings dialog box appears.

8. Select the year, month, and day to view.



9. When you are finished, click **Close**. SonicWALL ViewPoint displays the report for the selected day. **Note:** These settings stay in effect for all reports during your active login session. Once you log out, the settings will be reset to the default values embedded in the software.

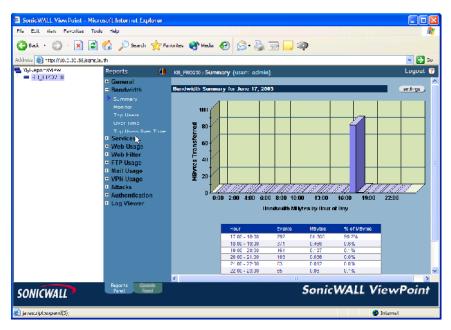
Monitoring Bandwidth Usage in Real Time

To view the Bandwidth Monitor, follow these steps:

The Bandwidth Monitor displays bandwidth usage for the selected SonicWALL appliance in real time.

- 1. Start and log into SonicWALL ViewPoint.
- 2. Click the **Reports** tab.
- 3. Select a SonicWALL appliance.

4. Expand the Bandwidth tree and click **Monitor**. The Monitor page appears.



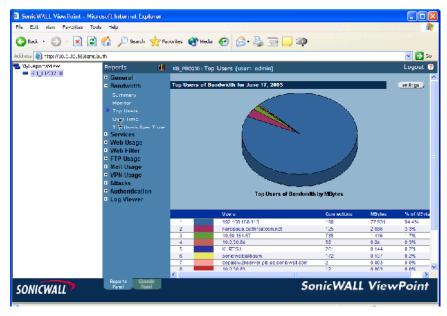
5. The Bandwidth Monitor shows the amount of data transferred during each sampling period for the last five minutes. The sampling period is five seconds.

Viewing the Top Users of Bandwidth

The Top Users report displays the users who used the most bandwidth on the specified date.

To view the Top Users report, follow these steps:

- 1. Start and log into SonicWALL ViewPoint.
- 2. Click the **Reports** tab.
- 3. Select a SonicWALL appliance.
- 4. Expand the Bandwidth tree and click **Top Users**. The Top Users page appears.



- 5. The pie chart displays the percentage of bandwidth transferred by each user.
- 6. The table contains the following information:
 - Users—the IP address of the user.
 - Connections—number of events or "hits."
 - MBytes—number of megabytes.
 - **% of MBytes**—percentage of megabytes transferred by this user, compared to all users. For example, if 1000 megabytes of data was transferred during the day and 200 megabytes was transferred by the top user, the **% of MBytes** field will display 20%.

7. By default, SonicWALL ViewPoint shows today's report, a pie chart, and the ten top users. To change these settings, click **Settings**. The Report Settings dialog box appears.



- 8. Select the number of users to display from the **Number of Users** list box.
- 9. Select the type of chart from the **Chart Type** list box.
- 10. Select the year, month, and day to view.
- 11. When you are finished, click Close. SonicWALL ViewPoint displays the report for the selected day.

Note: These settings stay in effect for all reports during your active login session. Once you log out, the settings will be reset to the default values embedded in the software.

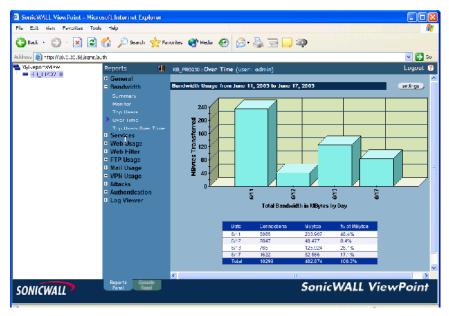
Viewing Bandwidth Usage Over Time

The Bandwidth Over Time report displays the daily amount of traffic handled by a SonicWALL appliance or a group of SonicWALL appliances for the specified time period.

To view the Bandwidth Over Time report, follow these steps:

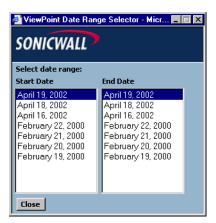
- Start and log into SonicWALL ViewPoint.
- 2. Click the **Reports** tab.
- 3. Select the global icon, a group, or a SonicWALL appliance.

4. Expand the Bandwidth tree and click **Over Time**. The Over Time page appears.



- The bar graph displays the amount of bandwidth transferred during each day of the specified time period.
- 6. The table contains the following information:
 - **Date**—when the sample was taken.
 - Connections—number of hits.
 - MBytes—number of megabytes transferred.
 - % of Usage—percentage of megabytes transferred during this day, compared to the time period.
 For example, if 100,000 megabytes of data was transferred during the time period and 25,000 megabytes was transferred on one day, the % of Usage field will display 25%.
- To change the date range of the report, click Settings. The Reporting Date Range Selector dialog box appears.

8. Select the starting and ending dates to view.



When you are finished, click Close. SonicWALL ViewPoint displays the report for the selected date range.

Note: These settings stay in effect for all reports during your active login session. Once you log out, the settings will be reset to the default values embedded in the software.

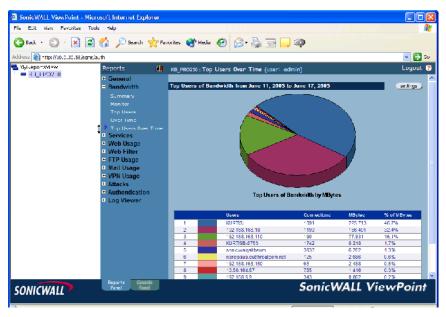
Viewing the Top Users of Bandwidth Over Time

The Top Users report displays the users who used the most bandwidth on the specified date.

To view the Top Users Over Time report, follow these steps:

- 1. Start and log into SonicWALL ViewPoint.
- 2. Click the **Reports** tab.
- 3. Select a SonicWALL appliance.
- 4. Expand the Bandwidth tree and click **Top Users Over Time**. The Top Users Over Time page appears.

5. The pie chart displays the percentage of bandwidth transferred by each user.



- 6. The table contains the following information:
 - Users—the IP address of the user.
 - Connections—number of events or "hits."
 - MBytes—number of megabytes.
 - **% of MBytes**—percentage of megabytes transferred by this user, compared to all users. For example, if 1000 megabytes of data was transferred during this period and 200 megabytes was transferred by the top user, the **% of MBytes** field will display 20%.

To change the date range of the report, click Settings. The Reporting Date Range Selector dialog box appears.



- 8. Select the starting and ending dates to view.
- When you are finished, click Close. SonicWALL ViewPoint displays the report for the selected date range.

Note: These settings stay in effect for all reports during your active login session. Once you log out, the settings will be reset to the default values embedded in the software.

Viewing Service Usage Reports

Service reports provide information on the amount of data transmitted through the selected SonicWALL appliance by each service.

Service reports are useful for revealing inappropriate usage of bandwidth and can help determine network policies. For example, if there is a large spike of bandwidth usage, you can determine whether this is caused by regular web access, someone using FTP to transfer large files, an attempted Denial of Service (DoS) attack, or another service.

Note: The single firewall report appears in firewall's local time. You cannot view services reports for a group of firewalls.

SonicWALL ViewPoint can monitor known services as well as custom services. To add a service to monitor, refer to the documentation that accompanied the SonicWALL appliance.

Select from the following:

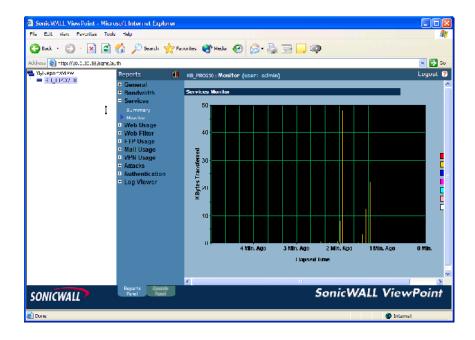
- To view service bandwidth usage in real time, see "Monitoring Service Usage in Real Time" on page 54.
- To view a summary of the daily service bandwidth usage, see "Viewing the Services Summary Report" on page 55.

Monitoring Service Usage in Real Time

The Services Monitor displays service usage for the selected SonicWALL appliance in real time.

To view the Service Monitor, follow these steps:

- 1. Start and log into SonicWALL ViewPoint.
- 2. Click the **Reports** tab.
- 3. Select a SonicWALL appliance.
- 4. Expand the Services tree and click **Monitor**. The Monitor page appears.



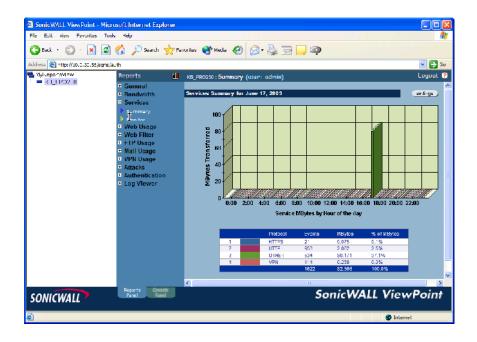
5. The Services Monitor shows the amount of data transferred for each service during each sampling period for the last five minutes. The sampling period is 15 seconds.

Viewing the Services Summary Report

The Services Summary report displays the amount of traffic handled by each service during each hour of the specified day.

To view the Services Summary report, follow these steps:

- 1. Start and log into SonicWALL ViewPoint.
- 2. Click the **Reports** tab.
- 3. Select a SonicWALL appliance.
- 4. Expand the Services tree and click **Summary**. The Summary page appears.



- 5. The bar graph displays the amount of bandwidth used by each service during each hour of the day.
- 6. The table contains the following information:
 - **Protocol**—the service.
 - MBytes—number of megabytes.
 - Events—number of events or "hits."
 - **% of Events**—percentage of events transferred by this service on the selected day, compared to all other services. For example, if 10,000 events occurred during the day and 9,000 of the events were handled by the HTTP service, the **% of Events** field will display 90%.

SonicWALL ViewPoint shows today's report. To change the date of the report, click Settings. The Report Settings dialog box appears.



- 8. Select the year, month, and day to view.
- 9. When you are finished, click Close. SonicWALL ViewPoint displays the report for the selected day. Note: These settings stay in effect for all reports during your active login session. Once you log out, the settings will be reset to the default values embedded in the software.

Viewing Web Usage Reports

Web usage reports provide information on the amount of web usage that occurs through the selected SonicWALL appliance(s).

Web usage reports can be used to view web bandwidth usage by the hour, day, or over a period of days. Additionally, you can view the top users of web bandwidth and view the most visited sites.

Note: The single firewall report appears in the firewall's local time. The aggregate multi-firewall report appears in Universal Time, Coordinated (UTC) or Greenwich Mean Time (GMT).

Select from the following:

- To view a summary of the daily web bandwidth usage, see "Viewing the Web Usage Summary Report" on page 57.
- To view a list of the top visited sites, see "Viewing the Top Sites" on page 58.
- To view the users who consume the most web bandwidth, see "Viewing the Top Users of HTTP Bandwidth" on page 60.
- To view the top sites visited by each user, see "Viewing HTTP Bandwidth Usage by User" on page 62.
- To view web bandwidth usage over a period of time, see "Viewing Bandwidth Usage Over Time" on page 63.
- To view a list of the top visited sites over time, see "Viewing Top Sites Over Time" on page 65.
- To view the users who consume the most web bandwidth over time, see "Viewing Top Users Over Time" on page 67.

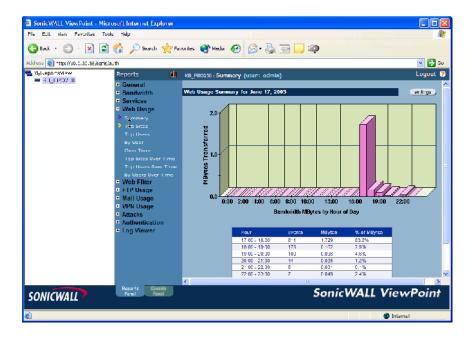
 To view the top sites visited by each user over time, see "Viewing Bandwidth Usage By User Over Time" on page 69.

Viewing the Web Usage Summary Report

The Web Usage Summary report contains information on the amount of HTTP bandwidth handled by a SonicWALL appliance or group of SonicWALL appliances during each hour of the specified day.

To view the Web Usage Summary report, follow these steps:

- 1. Start and log into SonicWALL ViewPoint.
- 2. Click the **Reports** tab.
- 3. Select the global icon, a group, or a SonicWALL appliance.
- 4. Expand the Web Usage tree and click **Summary**. The Summary page appears.



- 5. The bar graph displays the amount of HTTP bandwidth transferred during each hour of the day.
- 6. The table contains the following information:
 - Hour—when the sample was taken.
 - **Events**—number of events or "hits."
 - MBytes—number of megabytes transferred.

- % of MBytes—percentage of megabytes transferred during this hour, compared to the day. For example, if 1000 megabytes of HTTP data was transferred during the day and 100 megabytes was transferred at the 12:00 time period, the % of MBytes field will display 10%.
- 7. SonicWALL ViewPoint shows today's report. To change the date of the report, click **Settings**. The Report Settings dialog box appears.



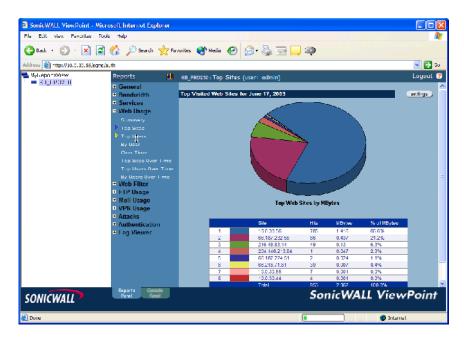
- 8. Select the year, month, and day to view.
- 9. When you are finished, click Close. SonicWALL ViewPoint displays the report for the selected day.

Viewing the Top Sites

The Top Sites report displays the web sites that used the most HTTP bandwidth on the specified date. To view the Top Sites report, follow these steps:

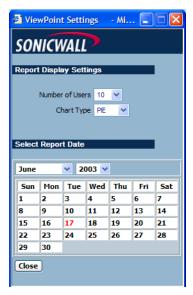
- 1. Start and log into SonicWALL ViewPoint.
- 2. Click the **Reports** tab.
- 3. Select a SonicWALL appliance.

4. Expand the Web Usage tree and click **Top Sites**. The Top Sites page appears.



- 5. The pie chart displays the percentage of bandwidth used to access the top sites.
- 6. The table contains the following information:
 - **Site**—URL or IP address of the site.
 - Hits—number of hits.
 - MBytes—number of megabytes transferred.
 - % of MBytes—percentage of megabytes transferred between this site, compared to all other HTTP traffic. For example, if 10,000 megabytes of data was transferred during the day and 5,000 megabytes was transferred between the appliance and Ebay, the % of MBytes field will display 50%.

7. By default, GMS Reporting shows today's report, a pie chart, and the ten top sites. To change these settings, click **Settings**. The Report Settings dialog box appears.



- 8. Select the number of sites to display from the **Number of Sites** list box.
- 9. Select the type of chart from the **Chart Type** list box.
- 10. Select the year, month, and day to view.
- 11. When you are finished, click Close. SonicWALL ViewPoint displays the report for the selected day. Note: These settings stay in effect for all reports during your active login session. Once you log out, the settings will be reset to the default values embedded in the software.

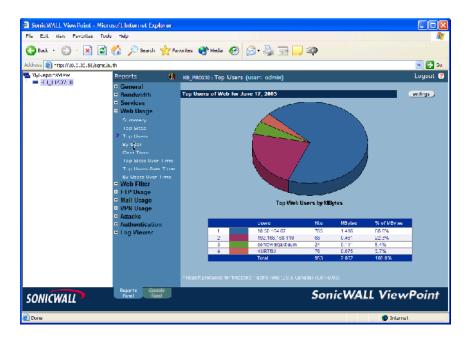
Viewing the Top Users of HTTP Bandwidth

The Top Users report displays the users who used the most HTTP bandwidth on the specified date.

To view the Top Users report, follow these steps:

- 1. Start and log into SonicWALL ViewPoint.
- 2. Click the **Reports** tab.
- 3. Select a SonicWALL appliance.

4. Expand the Web Usage tree and click **Top Users**. The Top Users page appears.



- 5. The pie chart displays the percentage of bandwidth transferred by each of the top users.
- 6. The table contains the following information:
 - Users—the IP address of the user.
 - Hits—number of hits.
 - MBytes—number of megabytes transferred.
 - % of MBytes—percentage of megabytes transferred by this user, compared to all users. For
 example, if 1000 megabytes of data was transferred during the day and 200 megabytes was transferred by the top user, the % of MBytes field will display 20%.

By default, GMS Reporting shows today's report, a pie chart, and the ten top users. To change these settings, click Settings. The Report Settings dialog box appears.



- 8. Select the number of users to display from the **Number of Users** list box.
- 9. Select the type of chart from the **Chart Type** list box.
- 10. Select the year, month, and day to view.
- 11. When you are finished, click Close. SonicWALL ViewPoint displays the report for the selected day. Note: These settings stay in effect for all reports during your active login session. Once you log out, the settings will be reset to the default values embedded in the software.

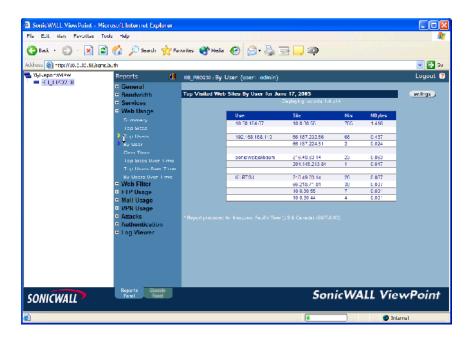
Viewing HTTP Bandwidth Usage by User

The By User report displays a list of all users, their top sites, the number of hits to each site, and the amount of data transferred.

To view the By User report, follow these steps:

- Start and log into SonicWALL ViewPoint.
- 2. Click the **Reports** tab.
- 3. Select a SonicWALL appliance.

4. Expand the Web Usage tree and click **By User**. The By User page appears.



- 5. The table contains the following information:
 - User—the IP address of the user.
 - Site—the top five sites visited by the user.
 - **Hits**—number of hits to each web site visited by the user.
 - MBytes—number of megabytes transferred.
- SonicWALL ViewPoint shows today's report. To change the date of the report, click Settings. The Report Settings dialog box appears.
- 7. Select the year, month, and day to view.
- 8. When you are finished, click Close. SonicWALL ViewPoint displays the report for the selected day.

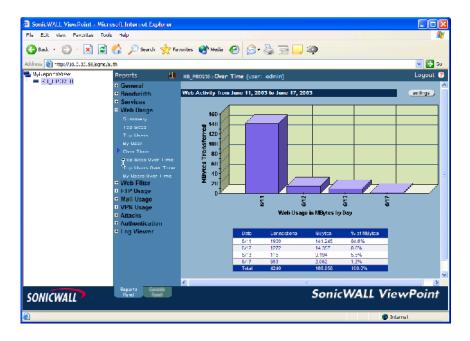
Viewing Bandwidth Usage Over Time

The Web Usage Over Time report displays the daily amount of HTTP bandwidth handled by a SonicWALL appliance or group of SonicWALL appliances for the specified time period.

To view the Web Usage Over Time report, follow these steps:

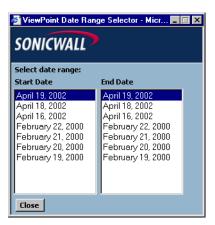
- 1. Start and log into SonicWALL ViewPoint.
- 2. Click the **Reports** tab.
- 3. Select the global icon, a group, or a SonicWALL appliance.

4. Expand the Web Usage tree and click **Over Time**. The Over Time page appears.



- 5. The bar graph displays the amount of HTTP bandwidth transferred during each day of the specified time period.
- 6. The table contains the following information:
 - Date—when the sample was taken.
 - Connections—number of connections or hits.
 - MBytes—number of megabytes transferred.
 - **% of Usage**—percentage of megabytes transferred during this day, compared to the time period. For example, if 100,000 megabytes of data was transferred during the time period and 25,000 megabytes was transferred on one day, the **% of Usage** field will display 25%.

To change the date range of the report, click Settings. The Reporting Date Range Selector dialog box appears.



- 8. Select the starting and ending dates to view.
- When you are finished, click Close. SonicWALL ViewPoint displays the report for the selected date range.

Note: These settings stay in effect for all reports during your active login session. Once you log out, the settings will be reset to the default values embedded in the software.

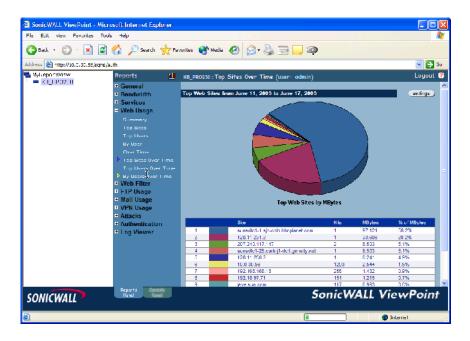
Viewing Top Sites Over Time

The Top Sites Over Time report displays the most visited web sites for the specified time period.

To view the Top Sites Over Time report, follow these steps:

- 1. Start and log into SonicWALL ViewPoint.
- 2. Click the **Reports** tab.
- 3. Select a SonicWALL appliance.

4. Expand the Web Usage tree and click **Top Sites Over Time**. The Top Sites Over Time page appears.



- 5. The bar graph displays the amount of HTTP bandwidth transferred during each day of the specified time period.
- 6. The table contains the following information:
 - Site—URL or IP address of the site.
 - Hits—number of hits.
 - MBytes—number of megabytes transferred.
 - % of KBytes—percentage of megabytes transferred between this site, compared to all other HTTP traffic. For example, if 1,000 megabytes of data was transferred during the day and 500 megabytes was transferred between the appliance and Ebay, the % of MBytes field will display 50%.

To change the date range of the report, click Settings. The Reporting Date Range Selector dialog box appears.



- 8. Select the starting and ending dates to view.
- When you are finished, click Close. SonicWALL ViewPoint displays the report for the selected date range.

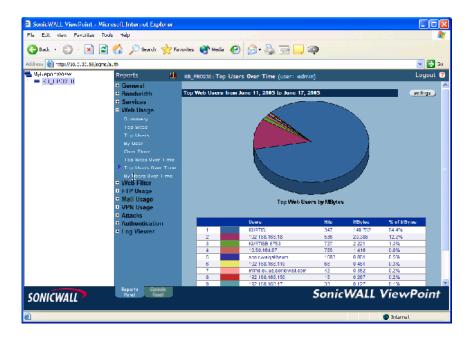
Note: These settings stay in effect for all reports during your active login session. Once you log out, the settings will be reset to the default values embedded in the software.

Viewing Top Users Over Time

The Top Users Over Time report displays the top users of bandwidth for the specified time period. To view the Top Users Over Time report, follow these steps:

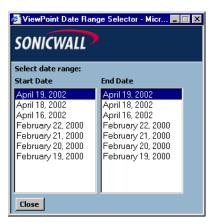
- 1. Start and log into SonicWALL ViewPoint.
- 2. Click the **Reports** tab.
- 3. Select a SonicWALL appliance.

Expand the Web Usage tree and click Top Users Over Time. The Top Users Over Time page appears.



- 5. The graph provides a graphical display of the percentage of bandwidth transferred by each of the top users over the specified time period.
- 6. The table contains the following information:
 - Users—the IP address of the user.
 - Hits—number of hits.
 - MBytes—number of megabytes transferred.
 - **% of MBytes**—percentage of megabytes transferred by this user, compared to all users. For example, if 1000 megabytes of data was transferred during the period and 200 megabytes was transferred by the top user, the **% of MBytes** field will display 20%.

To change the date range of the report, click Settings. The Reporting Date Range Selector dialog box appears.



- 8. Select the starting and ending dates to view.
- When you are finished, click Close. SonicWALL ViewPoint displays the report for the selected date range.

Note: These settings stay in effect for all reports during your active login session. Once you log out, the settings will be reset to the default values embedded in the software.

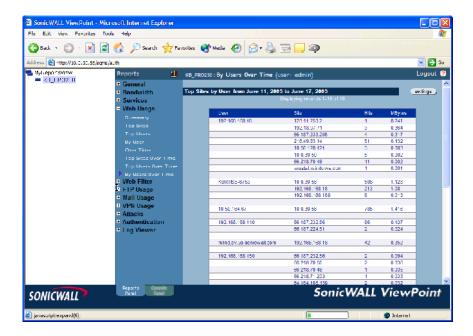
Viewing Bandwidth Usage By User Over Time

The By User Over Time report displays a list of all users, their top sites, the number of hits to each site, and the amount of data transferred for the specified time period.

To view the By User Over Time report, follow these steps:

- Start and log into SonicWALL ViewPoint.
- 2. Click the **Reports** tab.
- 3. Select a SonicWALL appliance.

4. Expand the Web Usage tree and click **By User Over Time**. The By User Over Time page appears.



- 5. The bar graph displays the amount of HTTP bandwidth transferred during each day of the specified time period.
- 6. The table contains the following information:
 - · User—the IP address of the user.
 - Site—the top five sites visited by the user.
 - Hits—number of hits to each web site visited by the user.
 - MBytes—number of megabytes transferred.

To change the date range of the report, click Settings. The Reporting Date Range Selector dialog box appears.



- 8. Select the starting and ending dates to view.
- When you are finished, click Close. SonicWALL ViewPoint displays the report for the selected date range.

Note: These settings stay in effect for all reports during your active login session. Once you log out, the settings will be reset to the default values embedded in the software.

Viewing Web Filter Reports

Web filter reports provide information on the number of attempts that users made to access blocked web sites through the selected SonicWALL appliance(s). These reports include web sites blocked by the Content Filter List, customized keyword filtering, and domain name filtering.

Web filter reports can be used to view blocked site access attempts by the hour, day, or over a period of days. Additionally, you can view the users that most frequently attempt to access blocked sites and the most popular blocked sites.

Note: The single firewall report appears in the firewall's local time. The aggregate multi-firewall report appears in Universal Time, Coordinated (UTC) or Greenwich Mean Time (GMT).

Select from the following:

- To view a summary of the blocked site access attempts, see "Viewing the Web Filter Summary Report" on page 72.
- To view a list of the blocked sites that users attempted to access most often, see "Viewing the Web Filter Top Sites Report" on page 73.
- To view the users who made the most attempts to access blocked sites, see "Viewing the Top Users that Try to Access Blocked Sites" on page 75.
- To view the top blocked sites that each user attempted to access, see "Viewing the Top Blocked Sites for Each User" on page 77.

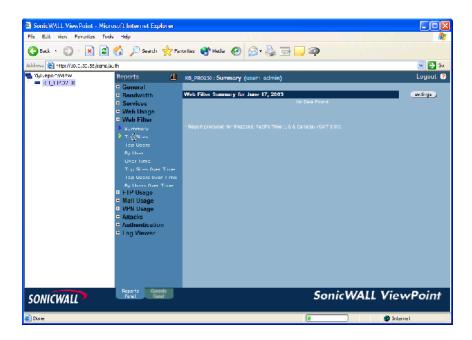
- To view blocked site access attempts over a period of time, see "Viewing Blocked Site Attempts Over Time" on page 79.
- To view a list of the blocked sites that users attempted to access most often over time, see "Viewing Blocked Site Attempts Over Time" on page 79.
- To view the users who made the most attempts to access blocked sites over time, see "Viewing the Top Blocked Site Users Over Time" on page 83.
- To view the top blocked sites that each user attempted to access over time, see "Viewing the Top Blocked Sites for Each User Over Time" on page 85.

Viewing the Web Filter Summary Report

The Web Filter Summary report contains information on the number of times users attempt to access blocked sites for the specified day.

To view the Web Filter Summary report, follow these steps:

- 1. Start and log into SonicWALL ViewPoint.
- 2. Click the **Reports** tab.
- 3. Select the global icon, a group, or a SonicWALL appliance.
- 4. Expand the Web Filter tree and click **Summary**. The Summary page appears.



The bar graph displays the number of blocked sites that users attempted to access during each hour of the day.

- 6. The table contains the following information:
 - **Hour**—time when the sample was taken.
 - Attempts—number of attempts to access blocked sites.
 - % of Attempts—percentage of attempts during this hour, compared to the day. For example, if
 100 attempts occurred during the day and 20 attempts occurred at the 12:00 time period, the % of
 Attempts field will display 20%.
- SonicWALL ViewPoint shows today's report. To change the date of the report, click Settings. The Report Settings dialog box appears.



- 8. Select the year, month, and day to view.
- 9. When you are finished, click Close. SonicWALL ViewPoint displays the report for the selected day.

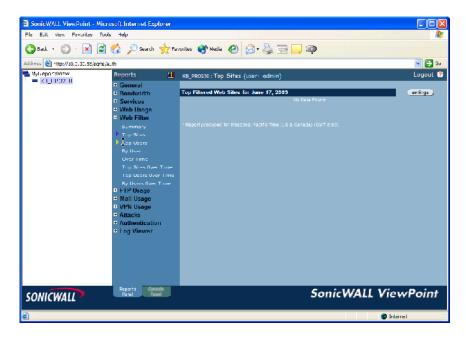
Viewing the Web Filter Top Sites Report

The Web Filter Top Sites report displays the top blocked web sites that users attempted to access on the specified date.

To view the Top Sites report, follow these steps:

- 1. Start and log into SonicWALL ViewPoint.
- 2. Click the **Reports** tab.
- 3. Select a SonicWALL appliance.

4. Expand the Web Filter tree and click **Top Sites**. The Top Sites page appears.



- 5. The graph provides a display of the number of access attempts for each of the top twenty blocked web sites.
- 6. The table contains the following information:
 - Site—URL or IP address of the site.
 - Attempts—number of attempts.
 - % of Attempts—percentage of attempts to access the blocked site, compared to all other blocked site attempts. For example, if 500 attempts were made during the day and 100 of those attempts were for www.badsite.com, its % of Attempts field will display 20%.

SonicWALL ViewPoint shows today's report. To change the date of the report, click Settings. The Report Settings dialog box appears.



- 8. Select the year, month, and day to view.
- 9. When you are finished, click Close. SonicWALL ViewPoint displays the report for the selected day.

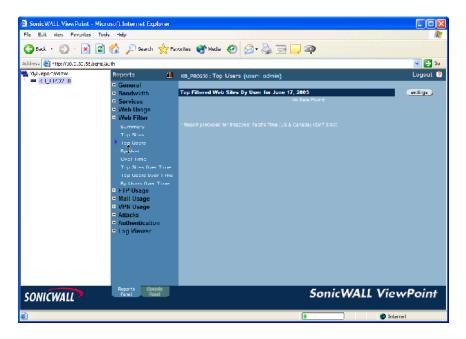
Viewing the Top Users that Try to Access Blocked Sites

The Web Filter Top Users report displays the users who made the most attempts to access blocked sites on the specified date.

To view the Top Users report, follow these steps:

- 1. Start and log into SonicWALL ViewPoint.
- 2. Click the **Reports** tab.
- 3. Select a SonicWALL appliance.

4. Expand the Web Filter tree and click **Top Users**. The Top Users page appears.



- 5. The pie chart displays the top users with the most blocked site attempts.
- 6. The table contains the following information:
 - Users—the IP address of the user.
 - Attempts—number of attempts.
 - % of Attempts—percentage of attempts to access the blocked site, compared to all other user attempts. For example, if 500 attempts were made during the day and 250 of those attempts were made by a single user, his % of Attempts field will display 50%.

7. By default, GMS Reporting shows today's report, a pie chart, and the ten top users. To change these settings, click **Settings**. The Report Settings dialog box appears.



- 8. Select the number of users to display from the **Number of Users** list box.
- 9. Select the type of chart from the **Chart Type** list box.
- 10. Select the year, month, and day to view.
- 11. When you are finished, click Close. SonicWALL ViewPoint displays the report for the selected day.

Note: These settings stay in effect for all reports during your active login session. Once you log out, the settings will be reset to the default values embedded in the software.

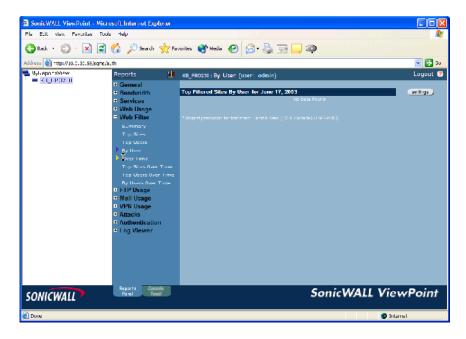
Viewing the Top Blocked Sites for Each User

The Web Filter By User report displays the top blocked web sites that each user attempted to access on the specified date.

To view the Web Filter By User report, follow these steps:

- Start and log into SonicWALL ViewPoint.
- 2. Click the **Reports** tab.
- 3. Select a SonicWALL appliance.

4. Expand the Web Filter tree and click By User. The By User page appears.



- 5. The table contains the following information:
 - User—the IP address of the user.
 - Site—the top five sites visited by the user.
 - Attempts—number of attempts the user made to access each web site.

6. By default, SonicWALL ViewPoint shows today's report, a pie chart, and the ten top users. To change these settings, click **Settings**. The Report Settings dialog box appears.



- 7. Select the number of users to display from the **Number of Users** list box.
- 8. Select the type of chart from the **Chart Type** list box.
- 9. Select the year, month, and day to view.
- 10. When you are finished, click Close. SonicWALL ViewPoint displays the report for the selected day.

Note: These settings stay in effect for all reports during your active login session. Once you log out, the settings will be reset to the default values embedded in the software.

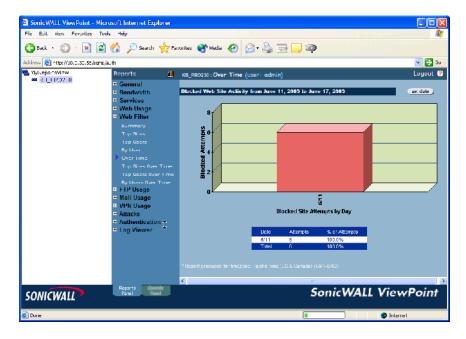
Viewing Blocked Site Attempts Over Time

The Web Filter Over Time report displays the number of attempts that were made to access blocked web sites for the specified time period.

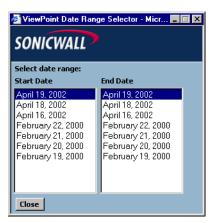
To view the Web Filter Over Time report, follow these steps:

- Start and log into SonicWALL ViewPoint.
- 2. Click the **Reports** tab.
- 3. Select the global icon, a group, or a SonicWALL appliance.

4. Expand the Web Filter tree and click **Over Time**. The Over Time page appears.



- 5. The bar graph displays the number of attempts that were made to access blocked web sites during each day of the specified time period.
- 6. The table contains the following information:
 - **Date**—day when the sample was taken.
 - Attempts—number of attempts to access blocked web sites.
 - % of Attempts—percentage of attempts to access the blocked site on the day, compared to the time period. For example, if 5,000 attempts were made during the time period and 500 were made on one day, its % of Attempts field will display 10%.



- 8. Select the starting and ending dates to view.
- When you are finished, click Close. SonicWALL ViewPoint displays the report for the selected date range.

Note: These settings stay in effect for all reports during your active login session. Once you log out, the settings will be reset to the default values embedded in the software.

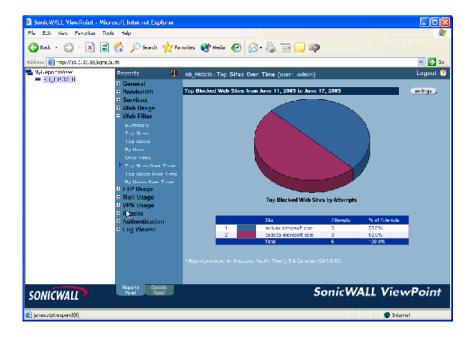
Viewing the Top Blocked Site Attempts Over Time

The Top Sites Over Time report displays the top blocked web sites for the specified time period.

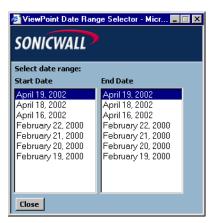
To view the Web Filter Over Time report, follow these steps:

- 1. Start and log into SonicWALL ViewPoint.
- 2. Click the **Reports** tab.
- 3. Select a SonicWALL appliance.

4. Expand the Web Filter tree and click **Top Sites Over Time**. The Top Sites Over Time page appears.



- 5. The graph displays the number of access attempts for each of the top blocked web sites during the specified time period.
- 6. The table contains the following information:
 - Site—URL or IP address of the site.
 - Attempts—number of attempts.
 - **% of Attempts**—percentage of attempts to access the blocked site, compared to all other blocked site attempts. For example, if 500 attempts were made during the period and 100 of those attempts were for www.badsite.com, its **% of Attempts** field will display 20%.



- 8. Select the starting and ending dates to view.
- When you are finished, click Close. SonicWALL ViewPoint displays the report for the selected date range.

Note: These settings stay in effect for all reports during your active login session. Once you log out, the settings will be reset to the default values embedded in the software.

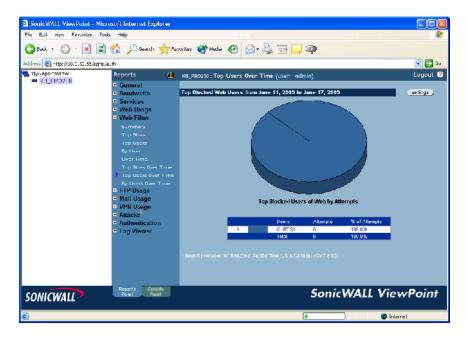
Viewing the Top Blocked Site Users Over Time

The Web Filter Top Users Over Time report displays the users who made the most attempts to access blocked sites during the specified time period.

To view the Top Users Over Time report, follow these steps:

- 1. Start and log into SonicWALL ViewPoint.
- 2. Click the **Reports** tab.
- 3. Select a SonicWALL appliance.

4. Expand the Web Filter tree and click **Top Users Over Time**. The Top Users Over Time page appears.



- 5. The pie chart displays the top users with the most blocked site attempts.
- 6. The table contains the following information:
 - Users—the IP address of the user.
 - Attempts—number of attempts.
 - **% of Attempts**—percentage of attempts to access the blocked site, compared to all other user attempts. For example, if 500 attempts were made during the period and 250 of those attempts were made by a single user, his **% of Attempts** field will display 50%.



- 8. Select the starting and ending dates to view.
- When you are finished, click Close. SonicWALL ViewPoint displays the report for the selected date range.

Note: These settings stay in effect for all reports during your active login session. Once you log out, the settings will be reset to the default values embedded in the software.

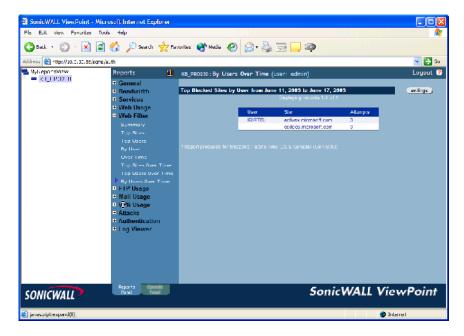
Viewing the Top Blocked Sites for Each User Over Time

The Web Filter By User report displays the top blocked web sites that each user attempted to access during the specified time period.

To view the By User Over Time report, follow these steps:

- Start and log into SonicWALL ViewPoint.
- 2. Click the **Reports** tab.
- 3. Select a SonicWALL appliance.

4. Expand the Web Filter tree and click **By User Over Time**. The By User Over Time page appears.



- 5. The table contains the following information:
 - User—the IP address of the user.
 - Site—the top five sites visited by the user.
 - Attempts—number of attempts the user made to access each web site.



- 7. Select the starting and ending dates to view.
- When you are finished, click Close. SonicWALL ViewPoint displays the report for the selected date range.

Note: These settings stay in effect for all reports during your active login session. Once you log out, the settings will be reset to the default values embedded in the software.

Viewing File Transfer Protocol Reports

FTP usage reports provide information on the amount of FTP usage that occurs through the selected SonicWALL appliance(s).

FTP usage reports can be used to view FTP bandwidth usage by the hour, day, or over a period of days. Additionally, you can view the top users of FTP bandwidth.

General bandwidth reports do not always provide a complete picture of network bandwidth usage. If a large amount of FTP traffic occurs during peak times, you might need more bandwidth, you might need to upgrade network equipment, or you might ask employees to use compression or transfer large files during non-peak times.

Note: The single firewall report appears in the firewall's local time. The aggregate multi-firewall report appears in Universal Time, Coordinated (UTC) or Greenwich Mean Time (GMT).

Select from the following:

- To view a summary of the daily FTP bandwidth usage, see "Viewing the FTP Summary Report" on page 88.
- To view the users who consume the most FTP bandwidth, see "Viewing the Top Users of FTP Bandwidth" on page 89.

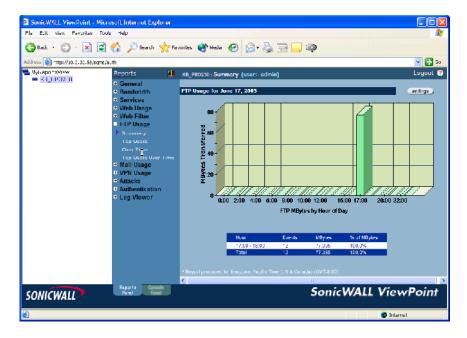
- To view FTP bandwidth usage over a period of time, see "Viewing FTP Bandwidth Usage Over Time" on page 91.
- To view the users who consume the most FTP bandwidth over time, see "Viewing FTP Bandwidth Usage Over Time" on page 91.

Viewing the FTP Summary Report

The FTP Summary report contains information on the amount of FTP bandwidth handled by a SonicWALL appliance or group of SonicWALL appliances during the specified day.

To view the FTP Summary report, follow these steps:

- 1. Start and log into SonicWALL ViewPoint.
- 2. Click the **Reports** tab.
- 3. Select the global icon, a group, or a SonicWALL appliance.
- 4. Expand the FTP Usage tree and click **Summary**. The Summary page appears.



- 5. The bar graph displays the amount of FTP bandwidth transferred during each hour of the day.
- 6. The table contains the following information:
 - **Hour**—when the sample was taken.
 - **Events**—number of FTP events.
 - MBytes—number of megabytes transferred.

- **% of MBytes**—percentage of megabytes transferred during this hour, compared to the day. For example, if 1000 megabytes of FTP data was transferred during the day and 100 megabytes was transferred at the 12:00 time period, the **% of MBytes** field will display 10%.
- SonicWALL ViewPoint shows today's report. To change the date of the report, click Settings. The Report Settings dialog box appears.



- 8. Select the year, month, and day to view.
- 9. When you are finished, click Close. SonicWALL ViewPoint displays the report for the selected day.

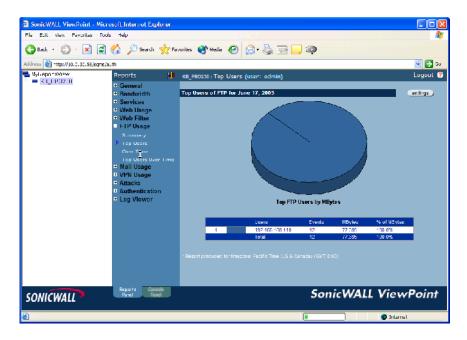
Viewing the Top Users of FTP Bandwidth

The Top Users report displays the users who used the most FTP bandwidth on the specified date.

To view the Top Users report, follow these steps:

- 1. Start and log into SonicWALL ViewPoint.
- 2. Click the **Reports** tab.
- 3. Select a SonicWALL appliance.

4. Expand the FTP Usage tree and click **Top Users**. The Top Users page appears.



- 5. The pie chart displays the percentage of bandwidth used by each user.
- 6. The table contains the following information:
 - Users—the IP address of the user.
 - Events—number of FTP Events.
 - MBytes—number of megabytes transferred.
 - % of MBytes—percentage of megabytes transferred by this user, compared to all users. For example, if ten megabytes of data was transferred during the day and two megabytes was transferred by the top user, the % of Mbytes field will display 20%.

7. By default, SonicWALL ViewPoint shows today's report, a pie chart, and the ten top users. To change these settings, click **Settings**. The Report Settings dialog box appears.



- 8. Select the number of users to display from the **Number of Users** list box.
- 9. Select the type of chart from the **Chart Type** list box.
- 10. Select the year, month, and day to view.
- 11. When you are finished, click Close. SonicWALL ViewPoint displays the report for the selected day.

Note: These settings stay in effect for all reports during your active login session. Once you log out, the settings will be reset to the default values embedded in the software.

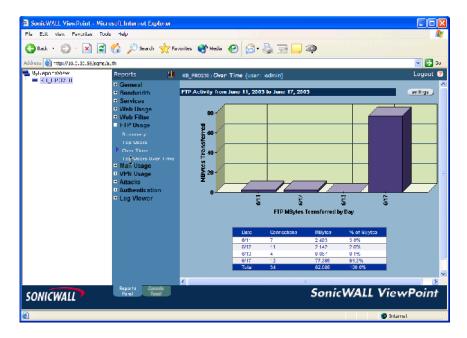
Viewing FTP Bandwidth Usage Over Time

The FTP Usage Over Time report displays the daily amount of FTP bandwidth handled by a SonicWALL appliance or group of SonicWALL appliances for the specified time period.

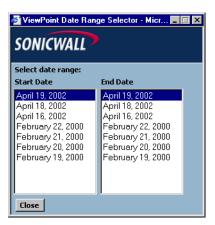
To view the FTP Usage Over Time report, follow these steps:

- Start and log into SonicWALL ViewPoint.
- 2. Click the **Reports** tab.
- 3. Select the global icon, a group, or a SonicWALL appliance.

4. Expand the FTP Usage tree and click **Over Time**. The Over Time page appears.



- 5. The bar graph displays the amount of FTP bandwidth transferred during each day of the specified time period.
- 6. The table contains the following information:
 - **Date**—when the sample was taken.
 - Connections—number of FTP connections.
 - MBytes—number of megabytes transferred.
 - % of Usage—percentage of megabytes transferred during this day, compared to the time period.
 For example, if 10,000 megabytes of FTP data was transferred during the time period and 2,500 megabytes of FTP data was transferred on one day, the % of Usage field will display 25%.



- 8. Select the starting and ending dates to view.
- When you are finished, click Close. SonicWALL ViewPoint displays the report for the selected date range.

Note: These settings stay in effect for all reports during your active login session. Once you log out, the settings will be reset to the default values embedded in the software.

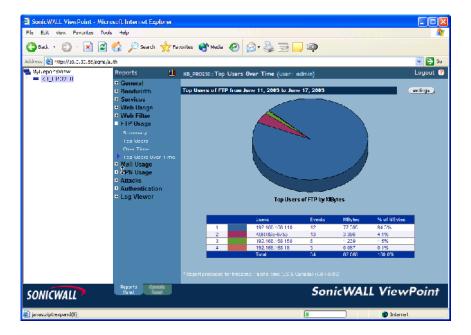
Viewing the Top Users of FTP Bandwidth Over Time

The Top Users Over Time report displays the users who used the most FTP bandwidth for the specified time period.

To view the Top Users Over Time report, follow these steps:

- 1. Start and log into SonicWALL ViewPoint.
- 2. Click the **Reports** tab.
- 3. Select a SonicWALL appliance.

Expand the FTP Usage tree and click Top Users Over Time. The Top Users Over Time page appears.



- 5. The pie chart displays the percentage of bandwidth used by each user.
- 6. The table contains the following information:
 - Users—the IP address of the user.
 - **Events**—number of FTP Events.
 - MBytes—number of megabytes transferred.
 - % of MBytes—percentage of megabytes transferred by this user, compared to all users. For
 example, if ten megabytes of data was transferred during the period and two megabytes was
 transferred by the top user, the % of MBytes field will display 20%.



- 8. Select the starting and ending dates to view.
- When you are finished, click Close. SonicWALL ViewPoint displays the report for the selected date range.

Note: These settings stay in effect for all reports during your active login session. Once you log out, the settings will be reset to the default values embedded in the software.

Viewing Mail Usage Reports

Mail usage reports provide information on the amount of mail usage that occurs through the selected SonicWALL appliance(s).

Mail usage reports can be used to view mail bandwidth usage by the hour, day, or over a period of days. Additionally, you can view the top users of mail bandwidth.

Note: Mail usage reports include SMTP, POP3, and IMAP traffic.

General bandwidth reports do not always provide a complete picture of network bandwidth usage. If a large amount of mail traffic occurs during peak times, you might want to take some of the following actions:

- Add bandwidth
- Upgrade network equipment
- Ask employees to use compression or transfer large files during non-peak times
- Ask employees to place large files on an FTP site rather than sending them as mail attachments.

Note: The single firewall report appears in the firewall's local time. The aggregate multi-firewall report appears in Universal Time, Coordinated (UTC) or Greenwich Mean Time (GMT).

Select from the following:

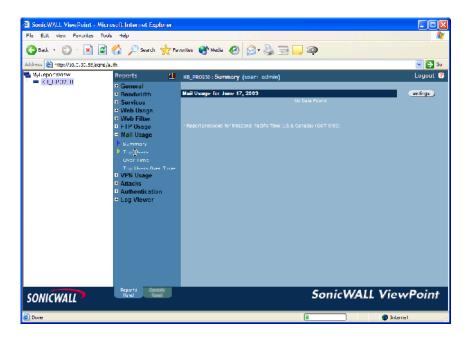
- To view a summary of the daily mail usage, see "Viewing the Mail Usage Summary Report" on page 96.
- To view the users who consume the most mail bandwidth, see "Viewing the Top Users of Mail Bandwidth" on page 97.
- To view mail usage over a period of time, see "Viewing Mail Usage Over Time" on page 99.
- To view the users who consume the most mail bandwidth over time, see "Viewing the Top Users of Mail Bandwidth Over Time" on page 101.

Viewing the Mail Usage Summary Report

The Mail Usage Summary report contains information on the amount of mail handled by a SonicWALL appliance or group of SonicWALL appliances during the specified day.

To view the Mail Usage Summary report, follow these steps:

- 1. Start and log into SonicWALL ViewPoint.
- 2. Click the **Reports** tab.
- 3. Select the global icon, a group, or a SonicWALL appliance.
- 4. Expand the Mail Usage tree and click **Summary**. The Summary page appears.



- 5. The bar graph displays the amount of mail sent and received during each hour of the day.
- 6. The table contains the following information:

- **Hour**—when the sample was taken.
- Events—number of mail events.
- MBytes—number of megabytes transferred.
- **% of MBytes**—percentage of megabytes transferred during this hour, compared to the day. For example, if 10,000 megabytes of mail was transferred during the day and 1,000 megabytes was transferred at the 12:00 time period, the **% of MBytes** field will display 10%.
- SonicWALL ViewPoint shows today's report. To change the date of the report, click Settings. The Report Settings dialog box appears.



- 8. Select the year, month, and day to view.
- 9. When you are finished, click Close. SonicWALL ViewPoint displays the report for the selected day.

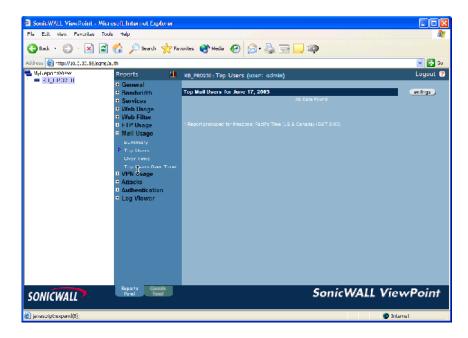
Viewing the Top Users of Mail Bandwidth

The Top Users report displays the users who sent and received the most mail on the specified date.

To view the Top Users report, follow these steps:

- 1. Start and log into SonicWALL ViewPoint.
- 2. Click the **Reports** tab.
- 3. Select a SonicWALL appliance.

4. Expand the Mail Usage tree and click **Top Users**. The Top Users page appears.



- 5. The pie chart displays the percentage of mail sent and received by the top mail users.
- 6. The table contains the following information:
 - Users—the IP address of the user.
 - Events—number of mail messages sent and received.
 - MBytes—number of megabytes transferred.
 - % of MBytes—percentage of megabytes transferred by this user, compared to all users. For
 example, if 10000 megabytes of data was transferred during the day and 2000 megabytes was
 transferred by the top user, the % of MBytes field will display 20%.

7. By default, SonicWALL ViewPoint shows today's report, a pie chart, and the ten top users. To change these settings, click **Settings**. The Report Settings dialog box appears.



- 8. Select the number of users to display from the **Number of Users** list box.
- 9. Select the type of chart from the **Chart Type** list box.
- 10. Select the year, month, and day to view.
- 11. When you are finished, click Close. SonicWALL ViewPoint displays the report for the selected day.

Note: These settings stay in effect for all reports during your active login session. Once you log out, the settings will be reset to the default values embedded in the software.

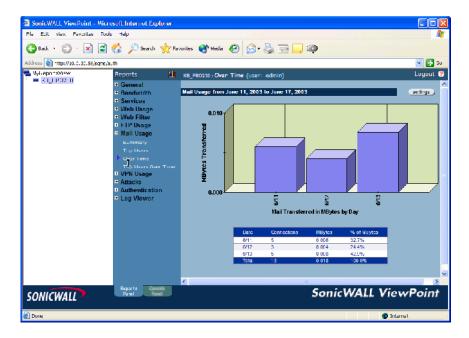
Viewing Mail Usage Over Time

The Mail Usage Over Time report displays the daily amount of mail handled by a SonicWALL appliance or group of SonicWALL appliances for the specified time period.

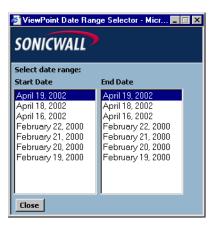
To view the Mail Usage Over Time report, follow these steps:

- Start and log into SonicWALL ViewPoint.
- 2. Click the **Reports** tab.
- 3. Select the global icon, a group, or a SonicWALL appliance.

4. Expand the Mail Usage tree and click **Over Time**. The Over Time page appears.



- 5. The bar graph displays the amount of mail sent and received during each day of the specified time period.
- 6. The table contains the following information:
 - Date—when the sample was taken.
 - Connections—number of mail messages.
 - MBytes—number of megabytes transferred.
 - % of Usage—percentage of megabytes transferred during this day, compared to the time period.
 For example, if 10,000 megabytes of mail was transferred during the time period and 2,500 megabytes of mail was transferred on one day, the % of Usage field will display 25%.



- 8. Select the starting and ending dates to view.
- When you are finished, click Close. SonicWALL ViewPoint displays the report for the selected date range.

Note: These settings stay in effect for all reports during your active login session. Once you log out, the settings will be reset to the default values embedded in the software.

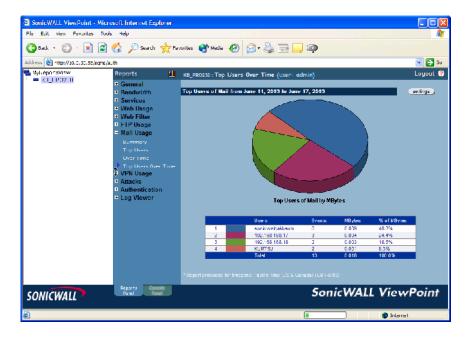
Viewing the Top Users of Mail Bandwidth Over Time

The Top Users Over Time report displays the users who sent and received the most mail during the specified time period.

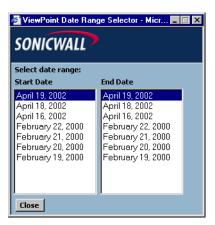
To view the Top Users Over Time report, follow these steps:

- 1. Start and log into SonicWALL ViewPoint.
- 2. Click the **Reports** tab.
- 3. Select a SonicWALL appliance.

 Expand the Mail Usage tree and click Top Users Over Time. The Top Users Over Time page appears.



- 5. The pie chart displays the percentage of mail sent and received by the top mail users.
- 6. The table contains the following information:
 - Users—the IP address of the user.
 - Events—number of mail messages sent and received.
 - MBytes—number of megabytes transferred.
 - % of MBytes—percentage of megabytes transferred by this user, compared to all users. For
 example, if 10000 megabytes of data was transferred during the period and 2000 megabytes was
 transferred by the top user, the % of MBytes field will display 20%.



- 8. Select the starting and ending dates to view.
- 9. When you are finished, click Close.GMS Reporting displays the report for the selected date range.

Note: These settings stay in effect for all reports during your active login session. Once you log out, the settings will be reset to the default values embedded in the software.

Viewing VPN Usage Reports

VPN Usage reports provide information on the amount of VPN usage that occurs through the selected SonicWALL appliance(s).

VPN Usage reports can be used to view VPN usage by the hour, day, or over a period of days. Additionally, you can view the top users of VPN.

General bandwidth reports do not always provide a complete picture of network bandwidth usage. If a large amount of VPN traffic occurs, you might need to add bandwidth, upgrade network equipment, or reconfigure the VPN network.

Note: The single firewall report appears in the firewall's local time. The aggregate multi-firewall report appears in Universal Time, Coordinated (UTC) or Greenwich Mean Time (GMT).

Select from the following:

- To view a summary of the daily VPN bandwidth usage, see "Viewing the VPN Usage Summary Report" on page 104.
- To view the users who consume the most VPN bandwidth, see "Viewing the Top VPN Users" on page 105.
- To view VPN bandwidth usage over a period of time, see "Viewing VPN Usage Over Time" on page 107.
- To view the users who consume the most VPN bandwidth over time, see "Viewing VPN Usage Over Time" on page 107.

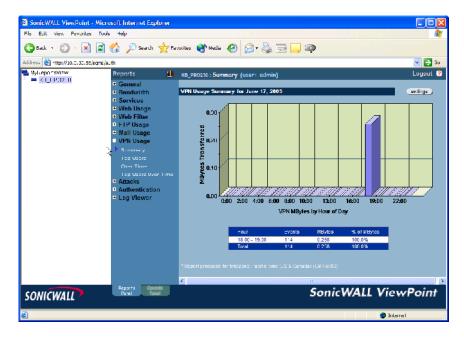
Viewing the VPN Usage Summary Report

The VPN Usage Summary report contains information on the number of VPN connections made through a

SonicWALL appliance or group of SonicWALL appliances during the specified day.

To view the VPN Usage Summary report, follow these steps:

- 1. Start and log into SonicWALL ViewPoint.
- 2. Click the **Reports** tab.
- 3. Select the global icon, a group, or a SonicWALL appliance.
- 4. Expand the VPN Usage tree and click Summary. The Summary page appears.



- 5. The bar graph displays the number of VPN connections made during each hour of the day.
- 6. The table contains the following information:
 - **Hour**—when the sample was taken.
 - Connections—number of VPN connections.
 - % of Connections—percentage of VPN connections during this hour, compared to the day. For example, if 10,000 connections occurred during the day and 1,000 connections occurred during the 2:00 time period, the % of Connections field will display 10%.

SonicWALL ViewPoint shows today's report. To change the date of the report, click Settings. The Report Settings dialog box appears.



- 8. Select the year, month, and day to view.
- 9. When you are finished, click Close. SonicWALL ViewPoint displays the report for the selected day.

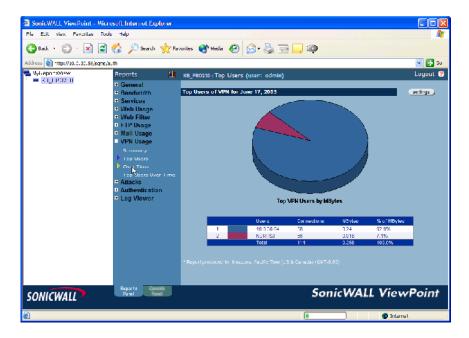
Viewing the Top VPN Users

The Top Users report displays the users who made the most VPN connections on the specified date.

To view the Top Users report, follow these steps:

- 1. Start and log into SonicWALL ViewPoint.
- 2. Click the **Reports** tab.
- 3. Select a SonicWALL appliance.

4. Expand the VPN Usage tree and click **Top Users**. The Top Users page appears.



- 5. The pie chart displays the VPN connections for the top VPN users.
- 6. The table contains the following information:
 - Users—the IP address of the user.
 - Connections—number of VPN connections.
 - % of Connections—percentage of VPN connections made by this user, compared to all other
 users. For example, if 10,000 connections occurred during the day and 1,000 connections were
 made by one user, the % of Connections field will display 10%.

7. By default, SonicWALL ViewPoint shows today's report, a pie chart, and the ten top users. To change these settings, click **Settings**. The Report Settings dialog box appears.



- 8. Select the number of users to display from the **Number of Users** list box.
- 9. Select the type of chart from the **Chart Type** list box.
- 10. Select the year, month, and day to view.
- 11. When you are finished, click Close. SonicWALL ViewPoint displays the report for the selected day.

Note: These settings stay in effect for all reports during your active login session. Once you log out, the settings will be reset to the default values embedded in the software.

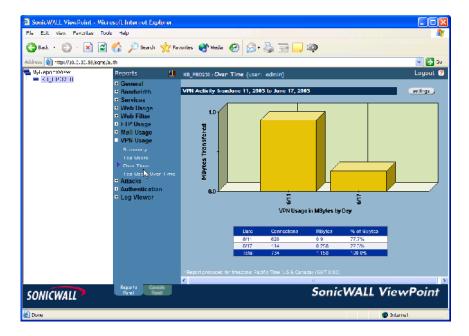
Viewing VPN Usage Over Time

The VPN Usage Over Time report displays the daily number of VPN connections made through a SonicWALL appliance or group of SonicWALL appliances during the specified time period.

To view the VPN Usage Over Time report, follow these steps:

- 1. Start and log into SonicWALL ViewPoint.
- 2. Click the **Reports** tab.
- 3. Select the global icon, a group, or a SonicWALL appliance.

4. Expand the VPN Usage tree and click **Over Time**. The Over Time page appears.



- 5. The bar graph displays the number of VPN connections made during each day of the specified time period.
- 6. The table contains the following information:
 - **Date**—when the sample was taken.
 - Connections—number of connections.
 - **KBytes**—number of kilobytes transferred.
 - % of Usage—percentage of kilobytes transferred during this day, compared to the time period.
 For example, if 10,000 kilobytes of mail was transferred during the time period and 2,500 kilobytes of mail was transferred on one day, the % of Usage field will display 25%.

To change the date range of the report, click Settings. The Reporting Date Range Selector dialog box appears.



- 8. Select the starting and ending dates to view.
- When you are finished, click Close. SonicWALL ViewPoint displays the report for the selected date range.

Note: These settings stay in effect for all reports during your active login session. Once you log out, the settings will be reset to the default values embedded in the software.

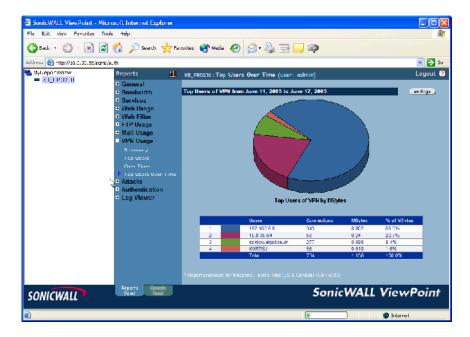
Viewing the Top VPN Users Over Time

The Top Users report displays the users who made the most VPN connections for the specified time period.

To view the Top Users report, follow these steps:

- 1. Start and log into SonicWALL ViewPoint.
- 2. Click the **Reports** tab.
- 3. Select a SonicWALL appliance.

Expand the VPN Usage tree and click Top Users Over Time. The Top Users Over Time page appears.



- 5. The pie chart displays the VPN connections for the top VPN users.
- 6. The table contains the following information:
 - Users—the IP address of the user.
 - Connections—number of VPN connections.
 - % of Connections—percentage of VPN connections made by this user, compared to all other users. For example, if 10,000 connections occurred during the period and 1,000 connections were made by one user, the % of Connections field will display 10%.

To change the date range of the report, click Settings. The Reporting Date Range Selector dialog box appears.



- 8. Select the starting and ending dates to view.
- When you are finished, click Close. SonicWALL ViewPoint displays the report for the selected date range.

Note: These settings stay in effect for all reports during your active login session. Once you log out, the settings will be reset to the default values embedded in the software.

Viewing Attack Reports

Attack reports show the number of attacks that were directed at or through the selected SonicWALL appliance(s). These include denial of service attacks, intrusions, probes, and all other malicious activity directed at the

SonicWALL appliance or computers on the LAN or DMZ.

Note: The single firewall report appears in the firewall's local time. The aggregate multi-firewall report appears in Universal Time, Coordinated (UTC) or Greenwich Mean Time (GMT).

Select from the following:

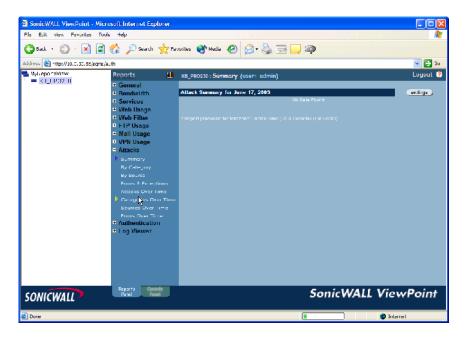
- To view a summary of the attacks, see "Viewing the Attack Summary Report" on page 112.
- To view the attacks by attack category, see "Viewing the Attacks by Category" on page 113.
- To view the attacks by source IP address, see "Viewing the Attacks by Source" on page 115.
- To view a summary of the errors and exceptions, see "Viewing the Errors and Exceptions Report" on page 117.
- To view attacks over a period of time, see "Viewing Attack Reports Over Time" on page 119.
- To view errors and exceptions over a period of time, see "Viewing Errors Over Time" on page 121.

Viewing the Attack Summary Report

The Attack Summary report contains information on the number of attacks attempted on a SonicWALL appliance or group of SonicWALL appliances during the specified day.

To view the Attack Summary report, follow these steps:

- 1. Start and log into SonicWALL ViewPoint.
- 2. Click the **Reports** tab.
- 3. Select the global icon, a group, or a SonicWALL appliance.
- 4. Expand the Attacks tree and click **Summary**. The Summary page appears.



- 5. The bar graph displays the number of attacks attempted during each hour of the day. The table contains the following information:
 - **Hour**—when the sample was taken.
 - Attacks—number of attack attempts.
 - % of Attacks—percentage of attacks during this hour, compared to the day. For example, if 1,000 attacks occurred during the day and 100 attacks occurred during the 2:00 time period, the % of Attacks field will display 10%.

SonicWALL ViewPoint shows today's report. To change the date of the report, click Settings. The Report Settings dialog box appears.



- 7. Select the year, month, and day to view.
- 8. When you are finished, click Close. SonicWALL ViewPoint displays the report for the selected day.

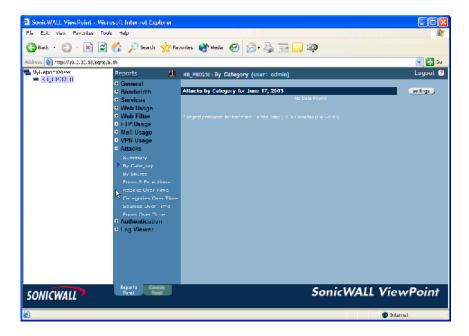
Viewing the Attacks by Category

The Attacks by Category report displays the attacks that occurred on the specified date, sorted by category.

To view the Attacks by Category report, follow these steps:

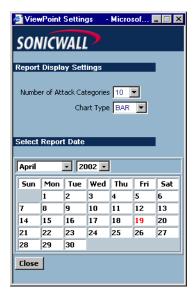
- 1. Start and log into SonicWALL ViewPoint.
- 2. Click the **Reports** tab.
- 3. Select a SonicWALL appliance.

4. Expand the Attacks tree and click By Category. The By Category page appears.



- 5. The pie chart displays the percentage of each type of attack.
- 6. The table contains the following information:
 - Type—the type of attack.
 - Attacks—number of attacks.
 - % of Attacks—percentage of this type of attack, compared to all other attack types. For example, if 5,000 attacks occurred during the day and the IP Spoof makes up 500 of the attacks, its % of Attacks field will display 10%.

7. By default, SonicWALL ViewPoint shows today's report, a pie chart, and the ten top categories. To change these settings, click **Settings**. The Report Settings dialog box appears.



- 8. Select the number of categories to display from the **Number of Categories** list box.
- 9. Select the type of chart from the **Chart Type** list box.
- 10. Select the year, month, and day to view.
- 11. When you are finished, click Close. SonicWALL ViewPoint displays the report for the selected day.

Note: These settings stay in effect for all reports during your active login session. Once you log out, the settings will be reset to the default values embedded in the software.

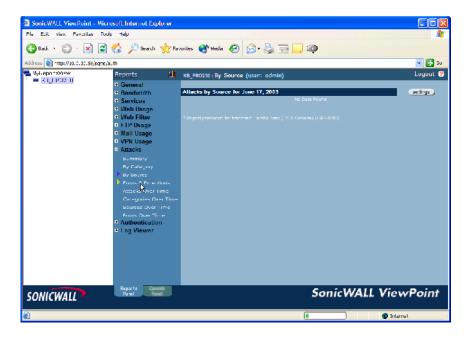
Viewing the Attacks by Source

The Attacks by Source report displays the top sources of attacks.

To view the Attacks by Source report, follow these steps:

- 1. Start and log into SonicWALL ViewPoint.
- 2. Click the **Reports** tab.
- 3. Select a SonicWALL appliance.

4. Expand the Attacks tree and click **By Source**. The By Source page appears.



- 5. The pie chart displays the percentage of each source of attack.
- 6. The table contains the following information:
 - **Source**—the source of the attack.
 - Attacks—number of attacks.
 - % of Attacks—percentage of attacks from this source, compared to all other sources. For example, if 1,000 attacks occurred during the day and 500 attacks came from one source, its % of Attacks field will display 50%.

7. By default, SonicWALL ViewPoint shows today's report, a pie chart, and the ten top sources. To change these settings, click **Settings**. The Report Settings dialog box appears.



- 8. Select the number of sources to display from the **Number of Sources** list box.
- 9. Select the type of chart from the **Chart Type** list box.
- 10. Select the year, month, and day to view.
- 11. When you are finished, click Close. SonicWALL ViewPoint displays the report for the selected day.

Note: These settings stay in effect for all reports during your active login session. Once you log out, the settings will be reset to the default values embedded in the software.

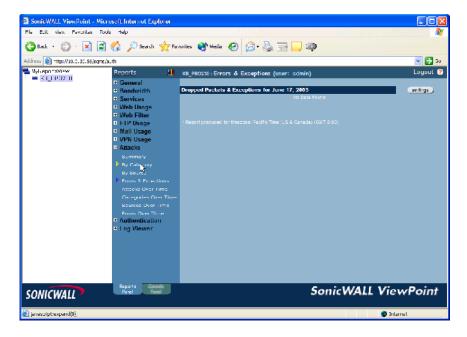
Viewing the Errors and Exceptions Report

The Errors and Exceptions Summary report contains information on the number of dropped packets on a SonicWALL appliance or group of SonicWALL appliances during the specified day.

To view the Errors and Exceptions report, follow these steps:

- 1. Start and log into SonicWALL ViewPoint.
- 2. Click the **Reports** tab.
- 3. Select the global icon, a group, or a SonicWALL appliance.

4. Expand the Attacks tree and click **Errors & Exceptions**. The Errors & Exceptions page appears.



- 5. The bar graph displays the packets that were dropped during each hour of the day.
- 6. The table contains the following information:
 - **Hour**—when the sample was taken.
 - Packets—number of dropped packets.
 - % of Packets—percentage of packets dropped during this hour, compared to the day. For example, if 1,000 packets were dropped during the day and 100 packets were dropped during the 1:00 time period, the % of Packets field will display 10%.

SonicWALL ViewPoint shows today's report. To change the date of the report, click Settings. The Report Settings dialog box appears.



- 8. Select the year, month, and day to view.
- 9. When you are finished, click Close. SonicWALL ViewPoint displays the report for the selected day.

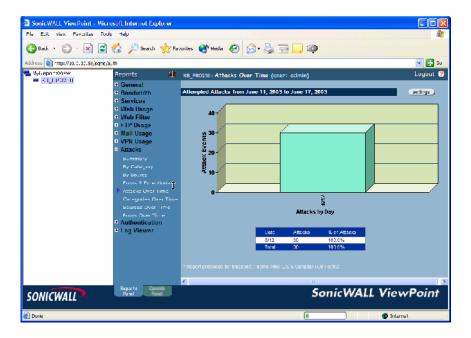
Viewing Attack Reports Over Time

The Attacks Over Time report displays the daily number of attempted attacks during the specified time period.

To view the Attacks Over Time report, follow these steps:

- 1. Start and log into SonicWALL ViewPoint.
- 2. Click the **Reports** tab.
- 3. Select the global icon, a group, or a SonicWALL appliance.

4. Expand the Attacks tree and click **Attacks Over Time**. The Attacks Over Time page appears.



- 5. The bar graph displays the number of attacks attempted each day of the specified time period.
- 6. The table contains the following information:
 - **Date**—when the sample was taken.
 - Attacks—number of attacks.
 - % of Attacks—percentage of attacks on this day, compared to the time period. For example, if 10,000 attacks occurred during the time period and 1,000 attacks occurred on Thursday, its % of Attacks field will display 10%.

To change the date range of the report, click Settings. The Reporting Date Range Selector dialog box appears.



- 8. Select the starting and ending dates to view.
- When you are finished, click Close. SonicWALL ViewPoint displays the report for the selected date range.

Note: These settings stay in effect for all reports during your active login session. Once you log out, the settings will be reset to the default values embedded in the software.

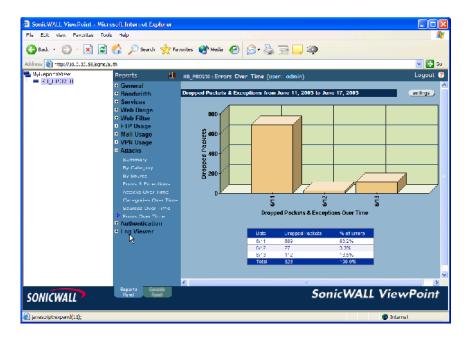
Viewing Errors Over Time

The Errors Over Time report displays the number of errors during the specified time period.

To view the Errors Over Time report, follow these steps:

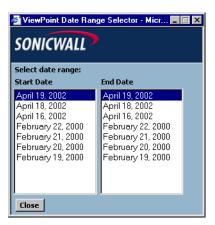
- 1. Start and log into SonicWALL ViewPoint.
- 2. Click the **Reports** tab.
- 3. Select the global icon, a group, or a SonicWALL appliance.

4. Expand the Attacks tree and click Errors Over Time. The Errors Over Time page appears.



- 5. The bar graph displays the number of packets that were dropped during each day of the specified time period.
- 6. The table contains the following information:
 - **Date**—when the sample was taken.
 - **Dropped Packets**—number of dropped packets.
 - % of Errors—percentage of dropped packets on this day, compared to the time period. For example, if 10,000 packets were dropped during the time period and 1,000 packets were dropped on Wednesday, its % of Attacks field will display 10%.

To change the date range of the report, click Settings. The Reporting Date Range Selector dialog box appears.



- 8. Select the starting and ending dates to view.
- When you are finished, click Close. SonicWALL ViewPoint displays the report for the selected date range.

Note: These settings stay in effect for all reports during your active login session. Once you log out, the settings will be reset to the default values embedded in the software.

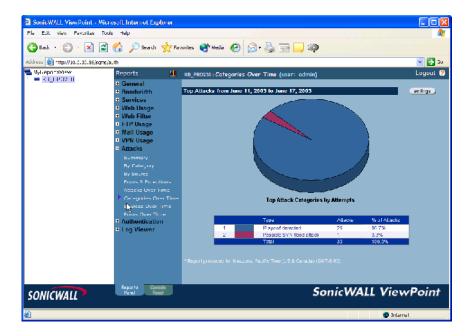
Categories Over Time

The Categories Over Time report displays the number of attacks in each attack category during the specified time period.

To view the Categories Over Time report, follow these steps:

- 1. Start and log into SonicWALL ViewPoint.
- 2. Click the **Reports** tab.
- 3. Select the global icon, a group, or a SonicWALL appliance.

4. Expand the Attacks tree and click **Categories Over Time**. The Categories Over Time page appears.



- 5. The bar graph displays the number of attacks attempted each day of the specified time period.
- 6. The table contains the following information:
 - Category—category of the attack.
 - Attacks—number of attacks.
 - % of Attacks—percentage of attacks for this category, compared to other categories. For example, if 5,000 attacks occurred during the time period and 1,000 attacks occurred for a category, its % of Attacks field will display 20%.

To change the date range of the report, click Settings. The Reporting Date Range Selector dialog box appears.



- 8. Select the starting and ending dates to view.
- When you are finished, click Close. SonicWALL ViewPoint displays the report for the selected date range.

Note: These settings stay in effect for all reports during your active login session. Once you log out, the settings will be reset to the default values embedded in the software.

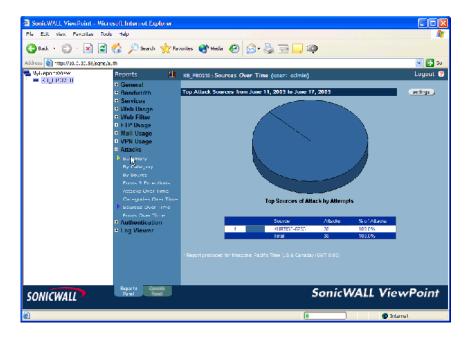
Sources Over Time

The Source Over Time report displays the number of attacks from each major source during the specified time period.

To view the Sources Over Time report, follow these steps:

- 1. Start and log into SonicWALL ViewPoint.
- 2. Click the **Reports** tab.
- 3. Select the global icon, a group, or a SonicWALL appliance.

4. Expand the Attacks tree and click **Sources Over Time**. The Categories Over Time page appears.



- 5. The bar graph displays the number of attacks attempted each day of the specified time period.
- 6. The table contains the following information:
 - Source—source of the attack.
 - Attacks—number of attacks.
 - % of Attacks—percentage of attacks from this source, compared to other sources. For example, if 2,000 attacks occurred during the time period and 1,000 attacks occurred from a source, its % of Attacks field will display 50%.

To change the date range of the report, click Settings. The Reporting Date Range Selector dialog box appears.



- 8. Select the starting and ending dates to view.
- When you are finished, click Close. SonicWALL ViewPoint displays the report for the selected date range.

Note: These settings stay in effect for all reports during your active login session. Once you log out, the settings will be reset to the default values embedded in the software.

Viewing Authentication Reports

The login reports show user logins, administrator logins, and failed login attempts for users and administrators.

Note: The single firewall report appears in the firewall's local time. The aggregate multi-firewall report appears in Universal Time, Coordinated (UTC) or Greenwich Mean Time (GMT).

Select from the following:

- To view user logins, see "Viewing the User Login Report" on page 127.
- To view administrator logins, see "Viewing the Administrator Login Report" on page 129.
- To view failed login attempts, see "Viewing the Failed Login Report" on page 130.

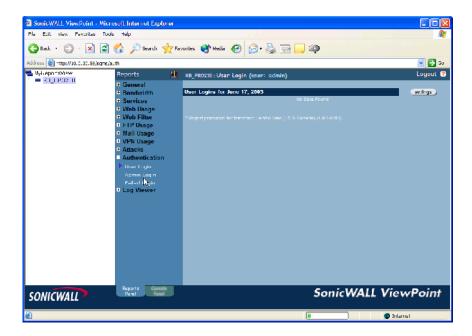
Viewing the User Login Report

The user login report shows users that logged on to the SonicWALL appliance during the specified day to bypass content filtering or to remotely access local network resources.

To view the User Login report, follow these steps:

- 1. Start and log into SonicWALL ViewPoint.
- 2. Click the **Reports** tab.

- 3. Select a SonicWALL appliance.
- 4. Expand the Authentication tree and click **User Login**. The User Login page appears.



- 5. The table contains the following information:
 - User—the user name.
 - Time—time the user logged in.
- SonicWALL ViewPoint shows today's report. To change the date of the report, click Settings. The Report Settings dialog box appears.



7. Select the year, month, and day to view.

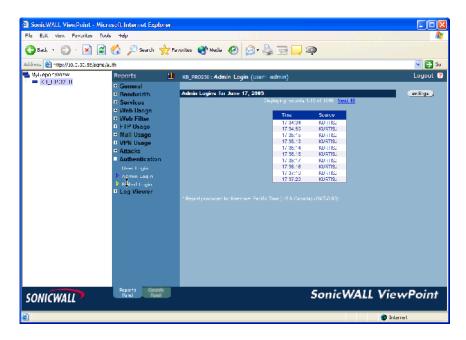
8. When you are finished, click Close. SonicWALL ViewPoint displays the report for the selected day.

Viewing the Administrator Login Report

The administrator login report shows successful administrator logins during the specified day. This report is useful for identifying misuse and unauthorized management of a SonicWALL appliance.

To view the Admin Login report, follow these steps:

- 1. Start and log into SonicWALL ViewPoint.
- 2. Click the **Reports** tab.
- 3. Select a SonicWALL appliance.
- 4. Expand the Authentication tree and click **Admin Login**. The Admin Login page appears.



- 5. The table contains the following information:
 - User—the user name.
 - Time—time the user logged in.
- SonicWALL ViewPoint shows today's report. To change the date of the report, click Settings. The Report Settings dialog box appears.

7. Select the year, month, and day to view.



8. When you are finished, click Close. SonicWALL ViewPoint displays the report for the selected day.

Viewing the Failed Login Report

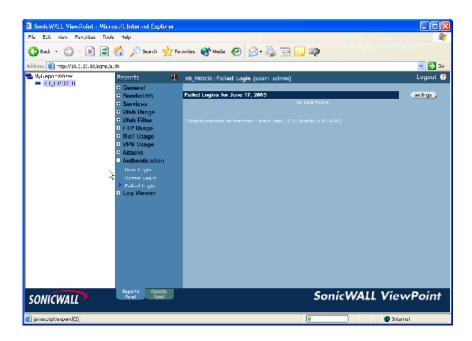
The failed login reports shows failed login attempts for users and administrators that attempted to log on to the

SonicWALL appliance during the specified day. This report is useful for identifying unauthorized access attempts and potentially malicious activity.

To view the Failed Login report, follow these steps:

- 1. Start and log into SonicWALL ViewPoint.
- 2. Click the **Reports** tab.
- 3. Select a SonicWALL appliance.

4. Expand the Authentication tree and click **Failed Login**. The Failed Login page appears.



- 5. The table contains the following information:
 - User—the user name.
 - Time—time the user logged in.
 - IP Address—IP address of the user.
- 6. SonicWALL ViewPoint shows today's report. To change the date of the report, click **Settings**. The Report Settings dialog box appears.



7. Select the year, month, and day to view.

8. When you are finished, click Close. SonicWALL ViewPoint displays the report for the selected day.

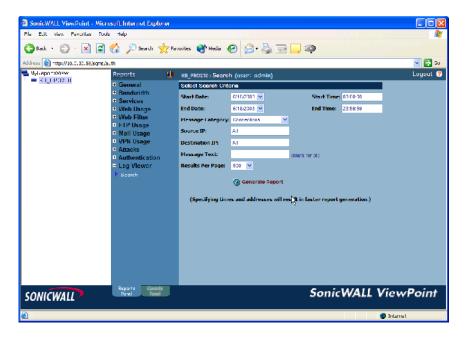
Viewing the Log

The Log Viewer contains detailed information on each transaction that occurred on the SonicWALL appliance or Ravlin device. This information is stored for the time that you specified in the configuration settings.

Note: The Log Viewer displays raw log information for every connection. Depending on the amount of traffic, this can quickly consume a large amount of space in the database. It is highly recommended to be careful when choosing the number of days of information that is stored. For more information, see "Summarizer Settings" on page 38.

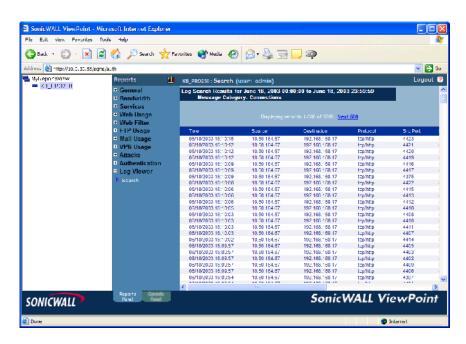
To view the log for a SonicWALL appliance, follow these steps:

- 1. Start and log into SonicWALL ViewPoint.
- 2. Click the **Reports** tab.
- 3. Select a SonicWALL appliance.
- 4. Expand the Log Viewer tree and click **Search**. The Search page appears.



- 5. Select the date to view from the **Date** list box.
- 6. Enter the starting time of events to view in the **Start Time** field.
- 7. Enter the ending time of events to view in the **End Time** field.

- 8. Select the type of events to view from the Message Category list box.
- Enter the source IP address to view in the Source IP Address field. To view all IP addresses, enter All.
- 10. Enter the destination IP address to view in the **Destination IP Address** field. To view all IP addresses, enter All.
- 11. Select the number of entries to display per page from the **Results Per Page** field.
- 12. Click Generate Report. The Log Viewer Results page appears.



- 13. Search through the entries to find the information for which you are searching. To view the next page of entries, click **Next**.
- 14. To generate another report, click **Search** again in the Log Viewer Tree.

Technical Tips and Troubleshooting

Technical Tips

This section describes technical tips for operating SonicWALL ViewPoint.

Modifying the Serial Number of an Appliance

1. Create the vps rma.sql file in the *viewpoint directory*>:\bin folder and include the following:

```
-- This sql is used as part of the RMA procedure
USE sgmsdb
DECLARE @OLDSERIAL varchar(20), @NEWSERIAL varchar(20)
--CHANGE THESE TWO
SELECT @OLDSERIAL = 'OLDONE'
SELECT @NEWSERIAL = 'NEWONE'
-- DONT TOUCH ANYTHING BEYOND THIS
-- CHANGE THE SERIAL NUMBER IN SUMMARIZED TABLES
UPDATE vp_firewalls SET serial_number = @NEWSERIAL FROM params p, vp_firewalls vpf
WHERE p.serial = vpf.serial number and p.serial = @OLDSERIAL
-- CHANGE THE SERIAL IN RAW TABLES
DECLARE FIREWALLS CURSOR CURSOR
  FOR
    SELECT name
    FROM sysobjects WHERE name like 'FIREWALLS % % %'
    OPEN FIREWALLS CURSOR
    DECLARE @tableName varchar(60)
    FETCH NEXT FROM FIREWALLS CURSOR INTO @tableName
```

```
WHILE (@@FETCH STATUS <> -1)
    BEGIN
    IF (@@FETCH STATUS <> -2)
      BEGIN
       SELECT @tableName = RTRIM(@tableName)
      EXEC ('UPDATE ' + @tableName + ' SET serial number = ' + '''' + @NEWSERIAL + ''''
+ ' WHERE serial number like ' + '''' + @OLDSERIAL + '''')
PRINT 'Updated ' + @tableName
      END
      FETCH NEXT FROM FIREWALLS CURSOR INTO @tableName
    END
CLOSE FIREWALLS CURSOR
DEALLOCATE FIREWALLS CURSOR
-- UPDATE THE PARAMS SERIAL ITSELF NOW
UPDATE PARAMS SET SERIAL = @NEWSERIAL WHERE SERIAL LIKE @OLDSERIAL;
```

- Replace the OLDONE and NEWONE variables with the old serial number and the new serial number of the SonicWALL appliance.
- 3. Save the vps rma.sql file.
- 4. Execute the following SQL command at the command-line prompt from the <viewpoint directory>:\bin folder:

```
osql -U username -P password -S 127.0.0.1\SNWL -I vps_rma.sql
where username is the database username 'sa' and password is the database password.
```

ViewPoint Database Port Number

The ViewPoint MSDE database listens at a specific port number. To find out which is port is used, enter the command SVRNETCN at the command-line prompt.

This command opens the SQL Server Network Utility menu. If there are multiple SQL Server instances running on the system, you may see multiple entries in the **Instance(s) on this server** list box. To view the port, right-click ServerName\SNWL and select Properties.

Changing the ViewPoint Web Server Port Number

During installation, you specified a port number (e.g., 80) for the ViewPoint Web Server. To change it after installation, follow these steps:

1. Open the following file:

```
<viewpoint_directory>:/Tomcat/conf/server.xml
```

Locate the following line:

```
Parameter name="port" value="80"
```

3. Change the value to another port number.

4 Save the file and exit

Changing the ViewPoint Server IP Address

If you changed the IP address of the SonicWALL ViewPoint server, follow these steps:

- 1. Stop all SonicWALL ViewPoint services.
- 2. Execute the following SQL commands from a DOS window:

```
osql -U <userid> -P <password> -Q "update sgmsdb.dbo.schedulers set ipAddress = 'new ip' where ipAddress = 'old ip'"
```

where *<userid>* is the database name "sa" and *<password>* is the database password.

Restart all SonicWALL ViewPoint services.

Changing the Default Syslog Server Port Number

By default, the SonicWALL ViewPoint syslog server default port number is 514 on a Windows system. To change the port, follow these steps:

- 1. Open the c:\sgmsConfig.xml file with a text editor.
- 2. Update the following line to the end of the file before the </Configuration> section:

```
Parameter name="syslog.syslogServerPort" value="port_number" where port_number is the new port number.
```

- 3. Save the file and exit.
- 4. Ensure that the port number for the syslog server is also changed to this new value on the Log Settings page of the SonicWALL appliance.

The SonicWALL ViewPoint Log Files

SonicWALL ViewPoint provides a number of log files that can be used for troubleshooting. These files are located in the SonicWALL ViewPoint Logs directory and include:

- msde.log—MSDE Installation database log
- phase2install.log—Phase 2 Installation log
- VPWebServerLog.txt—Web Server log
- tomcaterr.log—Tomcat log
- tomcatout.log—Tomcat log
- vpSummarizerDbg.txt—Summarizer log in debug mode
- vpSummarizerLog.txt—Summarizer log in non-debug mode
- schedulerDbg.txt—Syslogd log in debug mode
- schedulerLog.txt—Syslogd log in non-debug mode

The following log files are also available:

viewpoint directory>\SonicWALL ViewPoint 2.0 installLog.log—Phase 1 Installation log

C:\ViewPoint20_uninstall.log—Uninstall log

Encrypting the sgmsConfig.xml File

To encrypt text for use in the sgmsConfig.xml and web.xml files, do the following:

- 1. Navigate to the *<viewpoint directory>*:\bin folder.
- 2. Enter the following command at the command-line prompt:

```
java -cp . TEAV text where text is the text string to encrypt.
```

The encrypted string is returned.

3. Add the encrypted string to the sgmsConfig.xml or web.xml file.

Note: This procedure only performs encryption.

Encrypted Data in the sgmsConfig.xml File

The sgmsConfig.xml and web.xml files contain encrypted data. The following information is encrypted using Tiny Encryption technology:

- Database Password
- Database Name
- Database Username
- Database Owner

Resetting the Admin Password

To reset the admin user's password to default value of 'password', enter the following from the commandline prompt:

```
osql -U DBuser -P DBpassword -q "exit(update sgmsdb.dbo.users set password = '5f4dcc3b5aa765d61d8327deb882cf99' where id like 'admin')"
```

where *DBuser* is the database username "sa" and *DBpassword* is the database password.

Copying into the SonicWALL ViewPoint User Interface

The Java Plug-in version 1.3 and later does not allow applets to access user clipboards. To circumvent this, you must explicitly allow applets to access your clipboard. To do this, follow these steps:

- 1. Open the java.policy file with a text editor. This file is usually located in the following directory:

 c:\Program Files\JavaSoft\JRE\1.3\lib\security
- Add the following line to the top of the file after the "// "standard" properties that can be read by anyone":

```
permission java.awt.AWTPermission "accessClipboard", "write";
```

3. Save the java.policy file and exit.

Securing Access to the ViewPoint Web Server

This section describes how to configure SonicWALL ViewPoint to run using HTTPS.

Creating a Keystore with a Valid Test Certificate

To configure SonicWALL ViewPoint to use HTTPS, you must create a keystore with a valid test certificate. To do this, follow these steps:

1. From the command-line on the SonicWALL ViewPoint Console, change to the following directory:

```
viewpoint directory\jre\bin
```

where viewpoint directory is the directory where SonicWALL ViewPoint was installed.

2. Enter the following command:

.\keytool -genkey -alias spcert -keyalg RSA -keystore viewpoint directory\etc\keystore

- 3. You are prompted to enter the keystore password and other information.
- 4. When prompted to confirm the information, type yes and press Enter.
- 5. Enter key password for <spcert>. If the password is the same as the keystore password, press Enter. The certificate is issued for evaluation and testing purposes. To create a secure website using this certificate, see "Creating a Secure Website" on page 42. To use HTTPS with a valid certificate, you will need to obtain a certificate through a valid certificate authority (e.g., Verisign and Thawte) and store the certificate in the keystore that you just created.

Note: For information on getting a certificate from Thawte, visit http://www.orionserver.com/docs/ssl-howto.html.

Creating a Secure Website

This section describes how to create a secure website with server side authentication. To do this, follow these steps:

- 1. Open the *<viewpoint directory*>\jre\lib\security\java.security file with a text editor.
- 2. Locate the following entry:

```
provider.2
```

3. Replace it with the following:

```
provider.3
```

4. Insert the following line above the line that you just edited:

```
security.provider.2=com.sun.net.ssl.internal.ssl.Provider
```

- 5. Save the file and exit.
- 6. Open the *<viewpoint directory*>\Tomcat\conf\server.xml file with a text editor.
- 7. Locate the following entry:

```
<!--
<Connector className="org.apache.tomcat.service.PoolTcpConnector">
<Parameter name="handler"
value="org.apache.tomcat.service.http.HttpConnectionHandler"/>
```

```
<Parameter name="port"
value="8443"/>
<Parameter name="socketFactory"
value="org.apache.tomcat.net.SSLSocketFactory" />
</Connector>
-->
```

- 8. Remove the comment characters (<!--, -->).
- 9. Change the port value from 8443 to 443.
- 10. Enter the following lines below the port entry:

```
<Parameter name="keypass" value="keystore password"/>
<Parameter name="keystore" value="viewpoint directory\etc\keystore"/>
<Parameter name="clientAuth" value="false"/>
where keystore password is the keystore password that you entered when creating the
certificate and viewpoint directory is the directory where SonicWALL ViewPoint was
installed
The following is an example of a modified server.xml entry:
<Connector className="org.apache.tomcat.service.PoolTcpConnector">
<Parameter name="handler"</pre>
value="org.apache.tomcat.service.http.HttpConnectionHandler"/>
<Parameter name="port"
value="443"/>
<Parameter name="keypass" value="sgms11"/>
<Parameter name="keystore" value="D:\SGMS2\etc\keystore"/>
<Parameter name="clientAuth" value="false"/>
<Parameter name="socketFactory"
value="org.apache.tomcat.net.SSLSocketFactory" />
</Connector>
```

11. To disallow normal HTTP traffic, locate and comment out the following section:

```
<!-- Normal HTTP -->

<Connector className="org.apache.tomcat.service.PoolTcpConnector">
<Parameter name="handler"

value="org.apache.tomcat.service.http.HttpConnectionHandler"/>
<Parameter name="port" value="80"/>
</Connector>
When you are finished, it should look like the following:
<!-- Normal HTTP -->
<!--
<Connector className="org.apache.tomcat.service.PoolTcpConnector">
<Parameter name="handler"

value="org.apache.tomcat.service.http.HttpConnectionHandler"/>
<Parameter name="port" value="80"/>
</Connector>
-->
</connector>
```

12. Save the file and exit.

13. Restart the ViewPoint Web Server service.

Securely Accessing SonicWALL ViewPoint

To securely access SonicWALL ViewPoint, open a web browser and enter https://viewpoint_ipaddress where viewpoint_address is the address of the SonicWALL ViewPoint server.

Modify the desktop shortcut and make sure it points to https://localhost.

Troubleshooting

This section describes troubleshooting information for SonicWALL ViewPoint.

Installation Failure

ViewPoint 2.0 installation might fail if it cannot connect to the MSDE database on a Windows 2000 system. This can happen if you are installing ViewPoint 2.0 on a Windows system that is not connected to the network. To recover from this problem, follow these steps:

- 1. Uninstall ViewPoint 2.0.
- 2. Ensure your Windows system is on the network.
- 3. Ensure that the hostname for your PC is 20 characters or less.
- 4. Open the following file with a text editor:

```
c:\winnt\system32\drivers\etc\hosts
```

5. Add the following entries for 127.0.0.1 (after the existing localhost entry):

```
127.0.0.1 localhost
127.0.0.1 myMachineName
```

Where myMachineName is the name of your Windows system

Note: To obtain the hostname of your system, enter the command "hostname" at the command-line prompt.

- Reboot your Windows system and run <viewpoint_directory>\bin\postinstall.bat from the DOS prompt.
- Reboot your Windows system.

If the above does not work, perform the following steps:

- At the DOS prompt, from the <vi>iewpoint_directory>\bin folder, run the following SQL command:
 osql -U username -P password -S 127.0.0.1\SNWL
 where username is the database name 'sa' and password is the database password
- 2. At the database prompt (>), enter the following commands:

```
> select @@servername
> go
```

This returns the ViewPoint servername from the database in this format servername\SNWL. Record the servername (without the \SNWL).

- 3. Exit from the database by entering the following:
 - > quit
- 4. From the DOS prompt, enter the command SVRNETCN. The SQL Server Network Utility opens.
- If there are multiple SQL Server instances running on the system, you may see multiple entries in the
 Instance(s) on this server list box. To view the port, right-click ServerName\SNWL and select
 Properties.
- 6. Write down the port number.
- 7. Edit the C:\sgmsConfig.XML file and look for the following line:
 - <Parameter name="dburl" value="jdbc:inetdae7a:127.0.0.1/SNWL"/>
- 8. Replace the value of 127.0.0.1\SNWL with the following:

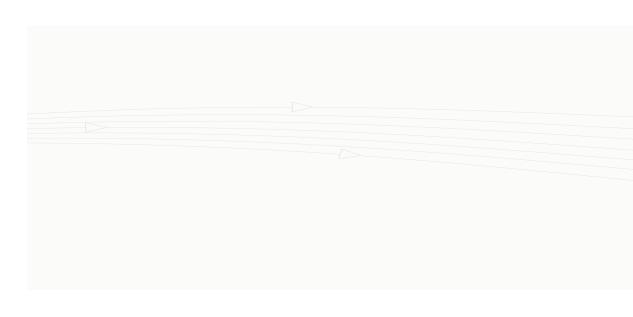
```
servername:port number
```

- 9. Save and exit from the sgmsConfig.XML file.
- 10. At the DOS prompt, from the *viewpoint directory*>\bin folder, run the postinstall.bat file.
- 11. Reboot your Windows system.

ViewPoint Reports

The following table lists the type of Reports that can be generated and viewed while logged into the ViewPoint. The table also indicates whether the report is available at the Unit or Group level.

Report Name	Unit level	Group Level
Bandwidth		•
Summary	Yes	Yes
Monitor	Yes	
Top Users	Yes	
Over Time	Yes	Yes
Top Users Over Time	Yes	
Services		
Summary	Yes	
Monitor	Yes	
Web Usage		
Summary	Yes	Yes
Top Sites	Yes	
Top Users	Yes	
By User	Yes	
Over Time	Yes	Yes
Top Sites Over Time	Yes	
Top Users Over Time	Yes	
By Users Over Time	Yes	
Web Filter Usage		
Summary	Yes	Yes
Top Sites	Yes	
Top Users	Yes	
By User	Yes	
Over Time	Yes	Yes
Top Sites Over Time	Yes	



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